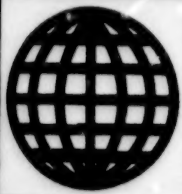


JPRS-TEN-94-013
16 May 1994



**FOREIGN
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JPRS Report

Environmental Issues

Environmental Issues

JPRS-TEN-94-013

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REGIONAL AFFAIRS

Roundup of Environmental Reports

AB2004113594

[Editorial Report] The following is a roundup of recent environmental reports monitored from media in FBIS Abidjan Bureau and EAU coverage areas from 30 March to 18 April.

CONGO

Dakar PANA in English, in a Brazzaville-dated item at 1415 GMT on 11 April reports that "Congo now fears for the future of its surface waters and pressures brought on its forests." In a paper on the "forest climate and ecosystem" in Impfondo, Likouala Region, Jose Djeni Bourges, regional director of the Forestry Commission underlined the adverse effects of the forest destruction. He said "the large destruction of forests leads to the lowering of the output of streams," citing the case of the Sangha and Obangui Rivers, on the border between Zaire and the Central African Republic. Bourges said there was a risk of the desert now threatening Chad encroaching on its forest. He added that countries separating Chad and Congo—Cameroon and the Central African Republic in particular—are among those which are mostly threatened with desertification. "According to official figures, Congo loses between 15,000 and 20,000 hectares of forest a year. Agricultural practice not friendly to the environment is considered the first cause of deforestation in the country."

London BBC World Service in English at 1515 on 18 April reports that due to the effects of the violence in the country last November, authorities are now planning to conduct a major hygiene operation in Brazzaville. This operation will involve digging up and properly reburying the bodies of those killed in the recent ethnic violence. Opposition and presidential supporters thought to have been responsible for the bloodshed will be called upon to help locate the cemeteries or shallow pits which were used as common graves for hurriedly-buried bodies. At least 200 people are known to have been killed during the clashes in Brazzaville.

GHANA

Accra Ghana Broadcasting Corporation Radio Network in English at 1300 GMT on 18 April in its press review column says the GHANAIAN TIMES carries the assurance by the Environmental Protection Council that a strange substance in River Ankorbra and its tributary is not harmful to human and animal life. The columnist quotes the Western regional program officer of the council as telling a meeting of fishermen in the communities along the river that a substance which emits a bad odor does not pose any danger to the health of the people. The chief of the area disputes the claim saying that the "presence of the substance in the river is scaring away fishermen from fishing because the substance damages their nets and affects their catch." The paper supports a decision by the Ministry of Food and Agriculture to provide fishing communities with basic needs. They quote the deputy minister of the ministry in charge of fisheries of telling some fishing communities in the Dangbe West and Dangbe East districts that landing

facilities at the beaches "would be provided to improve lighting systems and smoking sheds as well as tax-free concessions."

NIGER

Niamey Voix du Sahel Network in French at 1200 GMT on 31 March reports that the Goulbi River, the main water reserve which crosses the southern end of Maradi Region, is in danger. It is threatened by the construction of a dam in neighboring Nigeria. People and experts have been mobilized to find a suitable, lasting solution that would enable Niger to retain the waters that irrigate vast lands along the Goulbi River valley. Agricultural activities have slowed down in the Goulbi River valley because the river is drying out. Experts have studied the issue and decided to implement four water projects. The first one is a pilot project that is being tried out in a village located 6 km from Maradi. Once completed, the project will enable the flooding of about 17 hectares even during the dry season and will refill the Goulbi Basin.

Niamey Voix du Sahel Network in French at 1200 GMT on 4 April reports that the people of Goudoumaria, rendered powerless by a natural phenomenon, have found an easy alternative, but not necessarily the best. Sand dunes have encroached on their farms so they have begun a rural exodus. According to a Voix du Sahel correspondent in the region, "Goudoumaria covers an area of 9,500 square km for a population of 30,000 comprising Fulanis, Manga, Tubus, and Tuaregs who practice farming and animal husbandry." He goes on to say that the frequency and intensity of the wind which moves tons of sand from one place to another have forced people to leave their homes. A regional administrative official explains that because the people no longer have farming land they often go to Nigeria where they stay for months. He stresses that "theirs is a problem of survival because they have no money to buy food and some of their homes are totally buried in the sand." Commenting further on the situation of the people of Goudoumaria, the regional official suggests the creation of local jobs so that they could remain at home and support their families.

NIGERIA

Paris AFP in English at 0509 GMT on 30 March in a Lagos-dated item says: "Lake Chad has shrunk tenfold in the past three decades as a direct consequence of global warming, Nigeria's Minister for Water Resources Alhaji Isa Mohammed said here Tuesday. The lake has gradually shrunk from about 26,000 square kilometres (10,400 square miles) in 1962 to its present 2,500 square kilometres (1,000 square miles), Mohammed told an international workshop on the impact of global climate change on energy development."

The adverse phenomenon is the direct impact of global climatic change brought about by increased global warming caused by depletion of the ozone layer, Mohammed said. He welcomed the admission of the Central African Republic last week as the fifth member of the Lake Chad Basin Commission, meeting in Abuja, Nigeria, which could

pave the way for a transfer of water from the Upper Oubangui river to the Chari river in Chad to increase the flow into the lake.

Lagos NTA Television Network in English at 2000 GMT on 11 April carries a report in which the Administrator of Anambra State, Colonel Mike Attah says erosion is being tackled within the limited resources of the state, adding that representation has been made to the Federal Government on the issue. He made the observation while on a familiarization tour of Anaocha local government area of the state. In a report, NTA correspondent quotes the administrator as remarking that "with intensified revenue drive and prudent financial management, each local government council should be able to pay staff salaries promptly and embark on capital projects." He commended Anaocha local government for the various development projects. The reports says the chairman of the council drew the attention of the government to the "devastating effects of erosion in the area, the lack of motorable roads and health facilities within most communities."

Roundup of Environmental Reports

AB0305141594

The following is a roundup of recent environmental reports monitored from media in FBIS Abidjan Bureau and EAU coverage areas from 22 April to 2 May.

GHANA

Accra Ghana Broadcasting Corporation (GBC) Radio Network in English at 0600 GMT on 25 April reports that in order to check overdepletion of fish resources, the government has placed a ban on the importation of trawlers into the country. The radio says that the Ministry of Food and Agriculture is also taking steps to ensure that the ban on the use of undersized nets, dynamite sticks, and the fishing practice popularly called *atidsa*, where tree branches are placed in water to serve as shelter for fish, is strictly enforced. According to the GBC, the deputy minister of food and agriculture in charge of fisheries announced this during a tour of some fishing communities in the Volta Region. A correspondent quotes the minister as telling the fishermen that the government is greatly worried about the high depletion rate of fish resources and is taking steps to check the situation.

Accra Ghana Broadcasting Radio Network in English at 0600 GMT on 28 April states that delegates from five African countries are meeting at Aburi to work out a system of supporting environmental education initiatives in the subregion. The delegates are from Ghana, the Gambia, Nigeria, Sierra Leone, and Kenya. A correspondent report states that the course is being organized by the University of Bradford in the United Kingdom and the May Day Rural Project, a nongovernmental organization supported by the Overseas Administration of Britain. This is a follow-up to similar seminars in Ghana and the United Kingdom where participants call for more training schemes to enhance dissemination of environmental education. The course aims to acquaint participants with the definition and

historical evolution of environmental education by discussing the education strategy for Ghana and planning mechanisms to support the implementation of environmental initiatives in the subregion.

NICER

Niamey Voix du Sahel Network in French at 1200 GMT on 22 April reports that in several areas of Filingue District there are large numbers of plants like acacia, *albida*, or *gao*, in the southeast which are being threatened by farmers and herdsmen. Most of the 30,000 inhabitants in the area are pastoralists and during the past agricultural season, a significant amount of grazing ground was used. This has created a phenomenon of environmental deterioration. The animal breeders have used trees to feed animals. According to an environmental officer, this phenomenon is growing and if this practice continues there will be no environmental regeneration. The environment department is finding it difficult to find alternatives for the animal breeders, but until they do there is a need to alert the farmers and herdsmen to the importance of natural regeneration for the environment.

Paris AFP in French at 1120 GMT on 1 May reports ecologists in Niger have sounded the alarm about increasing usage of the plastic packings which pollute the country's main cities and have begun to threaten the health of human beings and livestock. On 23 April, Ecologica, a nongovernmental organization, launched a campaign called Plastic Packing-Free Environment Operation. Ecologica promised to supply schools with teaching equipment in exchange for the nonbiodegradable wastes they would collect. Ecologica has also called on beggars in urban centers to participate in the collection of plastic packings for recycling.

The Ministry of Environment has admitted the severity of the problem, while confessing its inability to face it. According to highway services, plastic packings now account for half of household waste in the cities. In Niamey, the City Council put in place trash cans exclusively for plastic packing waste, but since the cans are poorly protected they are emptied by the first gust of wind.

Sheep, goats, oxen, and asses wandering in the streets sometimes feed on this plastic waste. The veterinary clinic in Niamey says that in one month 30 animals suffered indigestion due to plastic packings. Human beings are also in danger since some people think that they can use the plastic waste as source of energy and inhale highly toxic substances.

NIGERIA

Lagos Radio Nigeria Network in English at 0600 GMT on 28 April reports the administrator of Adamawa State, Group Captain Gabriel Agbonene, has expressed concern over the problem of desertification. He was speaking in Lola when students of the Administrative Staff College of Nigeria, ASCON, called on him. Capt. Agbonene also highlighted some natural hazards which, he said, had affected the state. They include the (Logdo) Dam which

neighboring Cameroon usually opens with devastating effects on lives and property.

Earlier, the leader of the delegation, Mr. Adeyemi Yekini, said they were in the state to study the environmental problem with a view to recommending to the Federal Government how best to solve it.

Lagos Radio Nigeria Network in English 1500 GMT 25 Apr 94 reports that the Anambra State Government will undertake an experiment aimed at reducing the menace of soil erosion on some selected roads in various parts of the state. The state administrator disclosed this while exchanging views with representatives of a construction company at Government House. He told them his administration would welcome cost-effective ideas in dealing with the problem of infrastructural facilities. He noted that the nature of the soil in Anambra State had created enormous ecological problems, especially soil erosion. He said it was necessary to try a new technology that had won international recognition.

TANZANIA

Dar es Salaam Radio Tanzania Network in Swahili at 1700 GMT on 26 April states two Chinese nationals have been arrested by police after they were found in illegal possession of 135 pieces of ivory valued at more than 4 million shillings at a Kinondoni District house in Dar es Salaam. The Dar es Salaam regional police commander, Ndugu Tryphon Maji, identified the Chinese as (Shen Wen Hou)

alias (Chieng Chen) and (Niyaw Huwau Wen), both residing at 102, Victoria House. He said the Chinese were also found in illegal possession of an assortment of minerals, including rubies. The police commander said the value of the minerals, weighing 100 kg, has so far not been determined.

Ndugu Maji said one of the Chinese offered the police about 1 million shillings as a bribe to avert arrest, but the police declined the offer. He said the money had also been handed over to the police. [passage omitted]

ZAIRE

Kinshasa Voix du Zaire in French 1800 GMT on 29 April reports the rehabilitation of the Luki biosphere reserve in the Bas-Fleuve area has been launched by Benoit Kena Muaiki, secretary general for environment. The reserve, which is confronted with serious environmental deterioration, abounds in natural resources which represent various economic, scientific, and esthetic interests. It is even recognized as part of the world network of biosphere reserves. In fact, for many months now, the Luki reserve has been confronted with deforestation problems as a result of extensive agricultural activities, illegal exploitation, and indiscriminate occupation of forest zones. To minimize damage, the authorities have decided to demarcate the reserve, repair bridges, and ensure the maintenance of roads. They have also decided to erect 105 boards to ensure the protection of this ecosystem.

Environmental Protection Fair, Market Opens in Jiangsu

OW0505075494 Beijing XINHUA in English
0729 GMT 5 May 94

[Text] Nanjing, May 5 (XINHUA)—China's first environmental protection technology fair opened in Yixing, Jiangsu Province, today.

The National Environmental Protection Technology Market, located in the city's environmental protection science and technology park, also opened today.

On display during the five-day fair are 500 new materials and new products from manufacturers across the country. The fair is being sponsored jointly by the State Science and Technology Commission, the China Environmental Protection Industry Association and the Yixing City Government.

Included are equipment for treating waste water, purifying waste gas and controlling noise, meters and instruments, and both Chinese and foreign environmental protection techniques and information.

Yixing furnishes 15 percent of the annual output value of China's environmental protection industry. [Passage Omitted]

Guangdong Passes Law on Forest Regulation

OW0805133994 Beijing XINHUA in English
1259 GMT 8 May 94

[Text] Guangzhou, May 8 (XINHUA)—South China's Guangdong Province recently passed a new forest law, which is to come into effect soon.

The forest protection and management regulations, a revision of 1987 regulations, divides Guangdong's forests into ecological and public forests and commercial forests, to which different rules will apply.

The ecological and public forests include those for wind shelter, water and soil conservation, recreation and sight-seeing, and protection of plants and animals.

This area of forest land must account for no less than 30 percent of the total forest area and will be maintained under the government budget. It will be free from commercial felling, the new law reads.

Forest resources, including timber, fuel and economic forests, fall under the category of commercial forests.

According to the new regulations, the felling of commercial trees will be controlled by quotas and a licensing system. Commercial forests could be subject to rent, transfer and mortgage.

The new law encourages the development of forests through means other than governmental investment, such as the use of overseas funds or stock companies.

The publishing of the new law was preceded by the province's announcement last year that its forest coverage had reached 53.7 percent.

Forest officials said the new law is aimed at consolidating and expanding the province's achievement in afforestation, and establishing a new forest management system that fits with a market economy.

The new law stipulates that the province will keep its forest coverage above 50 percent and that all cities and towns allow for 30 percent of urban areas to remain green land.

The new law also contains detailed articles on punishment for offenses.

JAPAN

Tokyo Proposes Whaling of 100 Minke Whales to IWC Panel

OW3004134894 Tokyo KYODO in English 1113 GMT
30 Apr 94

[Text] Tokyo, April 30 KYODO—Japan has told the International Whaling Commission (IWC) that it plans to begin next year catching some 100 minke whales in the northern Pacific for scientific research purposes, government sources said Saturday [30 April].

Japan notified the plan to the IWC's scientific committee, which will meet in Mexico from 2 May, the sources said.

The program calls for catching 100 minke whales in waters south of the Kamchatka Peninsula in a three-month period from June to September 1995, to be followed by similar operations in the coming three to five years, the sources said.

An official of the Fishery Agency said Japan will reconsider the plan if the IWC adopts a resolution of opposition or urges Japan to have second thoughts.

The IWC is a 34-nation international forum for coordinating policies on whale conservation and consumption. The forum has adopted resolutions almost every year urging Japan and Norway to halt or rethink its research whaling.

The government sources said Japan decided to advance the latest plan as it needs to collect information on the number of minke whales in the waters and about their genes.

The Tokyo-based institute of cetacean research, commissioned by the Fisheries Agency, will oversee the research whaling conducted by Kyodo Senpaku, a private joint venture grouping various corporate whale catchers, they said.

Researchers aboard a fleet of whaling boats will investigate the length of minke whales, their gender, the ingredients in their stomachs, while analyzing their genes and the density of organic chlorinated chemicals accumulated in their bodies, they said.

The whale meat from the annual catches will be sold later for domestic commercial consumption, they said.

The convention governing the IWC authorizes research whaling, while keeping a ban on commercial whaling. The Japanese fleet has been catching an annual quota of 300 whales under the category of research whaling since 1987.

Many IWC member states and environmentalist groups have asked Japan and Norway to halt what they call research whaling, saying the two countries have been catching whales for commercial purposes under the pretext of scientific whaling.

Japan has asked for the IWC's authorization of its request to catch 50 minke whales a year in order to secure an international endorsement of its plan to resume its traditional coastal whaling.

However, its plea went nowhere in the face of opposition from opponents of whaling within the IWC.

An official of the Fishery Agency said, "the government submitted its minke whaling plan to the IWC scientific committee as information of minke whale stocks in the north Pacific is scarce."

"Japan will continue to demand authorization of an annual catch of 50 minke whales for the sake of a resumption of coastal whaling as a separate request from the latest program for the north Pacific," he said.

Coastal whaling by Japan has been suspended since 1988, when Japan withdrew its protests against the IWC resolution to put a moratorium on commercial whaling.

A minke whale measures an average 8 to 9 meters, and weighs 10 tons. Japan and Norway have argued that minke whale stocks have not been depleted as they have not been subjected to extensive catching in the past.

Japan has argued that its demand for an annual catch of 50 minke whales is legitimate as its claim to coastal whaling by fishermen is essentially identical to those by the Inuit Eskimo Community in Alaska as well as other whaling communities.

Environmentalists have argued that the amount of whale meat available on the Japanese market is much greater than the amount of meat provided from research whaling.

"Because whale meat becomes available as the result of research whaling, it provides a cover to whale meat provided by smuggling and poaching," said an official of the Japan branch of the World Wildlife Fund.

MITI Says PRC Could Cause Energy Crunch, Pollution

OW0605092194 Tokyo KYODO in English 0753 GMT
6 May 94

[Text] Tokyo, May 6 KYODO—The world would face a constant energy shortage and serious air pollution if China were to continue its economic growth without improving its energy efficiency, the Japanese trade ministry warned in a report Friday [6 May].

The report said China is generating 2.5 to 24.5 times more carbon compounds and 2.5 to 184 times more sulfur oxides than Japan to produce the same amount of steel, electric power, cement, paper and pulp.

The report was compiled by the International Trade and Industry Inspection Institute at the Ministry of International Trade and Industry and China's State Statistical Bureau, in cooperation with Keio University in Tokyo.

It said Japan and other industrial nations should cooperate with China to help control air pollution.

Carbon compounds are known to contribute to global warming and sulfur oxides are believed to cause acid rain.

The report said China depends on coal for 80 percent of its primary energy supplies but has no system for recycling energy.

To produce the same amount, steel mills in China used 3.0 times more energy than in Japan, power utilities 1.6 times more, cement plants 1.8 times and pulp mills 1.3 times more in the second half of the 1980s, the report said.

Few Chinese production facilities have desulfurization equipment and China generates 70 percent of Asia's sulfur oxides and 40 percent of its carbon compounds, it said.

EPA Calls For Effective Pollution Control Measures

OW0905113894 Tokyo KYODO in English 1111 GMT 9 May 94

[Text] Tokyo, May 9 KYODO—The Economic Planning Agency [EPA] on Monday [9 May] called for effective measures to control pollution such as introducing an environment protection tax and product recycling systems.

The agency made the appeal in releasing the results of a survey on environmental protection measures, including a deposit system for recyclable resources such as cans and bottles.

The survey showed that it is possible to make environmental preservation and economic activities compatible through the implementation of various measures, such as the introduction of an environmental protection tax and regulations under the existing law, the agency said.

The EPA said the survey centered on the merits and demerits of pollution control measures, including a levy on environmental protection and penalties against pollution.

The taxation and penalty method will be effective for environmental protection depending on tax rates and penalty fees, but it will raise the possibility of boosting prices of products, leading to a decline in consumer demand, it said.

The agency said government subsidies will be effective in helping factories install pollution control equipment, but it creates a problem of how to secure necessary funds.

A U.S. system which allows factories to purchase the right to discharge harmful carbon dioxide is effective in controlling pollution but it entails high costs for working out such a system, it said.

Tokyo To Take Initiative In APEC Environment Guidelines

OW0705051494 Tokyo KYODO in English 0500 GMT 7 May 94

[Text] Tokyo, May 7 KYODO—Japan plans to take the initiative in setting up guidelines on environment and labor for the Asia-Pacific Economic Cooperation (APEC) forum to defuse a North-South squabble over the issues, a Japanese Government source said Saturday [7 May].

The guidelines are expected to urge APEC members to enhance antipollution measures and improve labor conditions like wages, the source said. Japan aims at presenting the draft for the guidelines to 17 APEC members in preparatory work for the annual ministerial meeting to be held in Jakarta in late November, he said.

The APEC, established in 1989, groups Japan, Malaysia, Canada, Thailand, Australia, New Zealand, China, South Korea, Taiwan, Hong Kong, Brunei, Indonesia, the United States, Philippines, Singapore, Papua New Guinea, and Mexico.

The guidelines will include protection of tropical forest, introduction of a minimum wage ceiling system and enforcement of compulsory education with their medium- and long-term targets, the source said.

The camp of industrialized nations, led by the U.S. and France, calls for tightening trade curbs on such countries where preservation of environment and labor conditions remain below international standards, while developing countries fear such measures would risk their economic development.

SOUTH KOREA

Magazine Research Shows Office Pollution Worse Than Streets

SK0405073194 Seoul SISA JOURNAL in Korean Apr 94 p 46-47

[By So Song-mun: "Offices Worse Than Streets"]

[Text] Watch out for those stoves and cooking ranges. While the heat is warming our bodies, our bronchi are battling with nitrogen dioxide.

According to research on nitrogen dioxide density conducted by the Paedal Environmental Federation, upon the request of SISA JOURNAL, higher rates were shown in office buildings, offices with gas stoves, and areas closer to stoves than those shown in streets, offices without gas stoves, and areas further away from stoves.

On 25 March, the nitrogen dioxide density of an office near Socho high school in Socho-tong was 79.2 ppb [parts per billion]. This is the second highest reading among over 400 areas inspected. The reading on streets and a subway station near the same area on the same day was 32 and 64 ppb, respectively, lower than the one in the office.

During the first inspection, a heating system was on in the office. In order to measure the effect of heaters, we took a reading a second time on 14 April. A stove was on that day and the nitrogen dioxide density reached 110.7 ppb.

The density of nitrogen dioxide was higher when the stove was on because the flame produces more pollutants. The stove in the office was using liquefied petroleum gas. The density was 96 ppb beside the stove, 67 ppb a little further from the stove, 110.7 ppb and 99.8 near the windows, and 38.4 ppb at the entrance.

It was understandable that the density reading next to the stove was high, but it was unexpected that the highest reading was next to the window. It is believed that the pollutant produced by the flame expanded in the form of nitrogen monoxide and later it combined with the oxygen near the window to become nitrogen dioxide. Nitrogen monoxide is an unstable material.

On the other hand, the nitrogen dioxide density was the lowest at the entrance. This was because the entrance was far from the stove and the air circulated whenever the door was opened.

Contrary to this example, three points distant to each other in one office without any stove showed a much lower and even density at 43, 51, and 52 ppb, respectively. This was because there was no particular pollutant source such as a stove. However, the office still showed an equal or higher density than the ones in the streets nearby. This means that nitrogen dioxide pollution is more serious indoors.

The research illustrates the importance of air circulation in order to keep indoor air clean. However, this is meaningless when the air outdoors is polluted. Air has no boundaries and indoor air is eventually affected by air pollution. Therefore, the alternative is to widen exhaust ports and use fans to circulate indoor air. Using an air cleaner to filter pollutants from outdoor air is also a good idea.

However, there is a limit to air cleaners. When not properly managed and watched, they may have reverse effects by accumulating dust or pollutants full of bacteria in the outlets or in filters. This is the same reason why the nitrogen dioxide density in subway stations are twice as high as the streets above.

The research focused on nitrogen dioxide but there are various pollutant and pollution sources of indoor air. There are countless sources and pollutants around us: gas ranges and gas stoves which produce nitrogen dioxide, oil burners which produce sulfuric acid gas and cancer-causing (?form) aldehyde, briquet holes and briquet heaters which produce carbon monoxide, radon and asbestos from construction materials, and (?form) aldehyde from furniture and clothes. Nevertheless, studies or measures on this are far from sufficient.

Advanced countries have been aware of indoor pollution since the early seventies. Studies and regulation of such pollutants are active. In some countries, there are even departments fully in charge of indoor environment. According to Professor Kim Yun-sin, head of the Environmental and Industrial Medical Science Center of Hanyang University, in the United States, Congressman Joseph Kennedy submitted a bill on indoor air last year strengthening various regulations on indoor pollutants and detailing preventive and substitute measures.

PHILIPPINES

ASEAN Officials Agree To Harmonize Pollution Standards

BK0205091094 Manila *BUSINESS WORLD* in English
28 Apr 94 p 20

[By Rosemarie V. Francisco]

[Text] Environment officials and ministers of the six-member countries of the Association of Southeast Asian Nations (ASEAN) recently approved the implementation of a strategic plan of action on the environment (ASPEN) over a four-year period.

The approval of the plan was a major achievement of the 6th ministerial meeting on the environment since it harmonized environmental quality standards in the region, said Department of Environment and Natural Resources (DENR) Undersecretary Benjamin Bagadion, Jr. who headed the ASEAN Senior Officials on the Environment (ASOEN), the technical group which drafted the action plan.

Also, the ASEAN-member countries gave their go-signal to the proposal allowing the Philippines to house the ASEAN biodiversity center. This facilitates the release of the U.S. \$19 million funding for the center which will be provided by the European Union, since the funding was hedged on whether the ASEAN will approve the proposal.

The approval of the action plan took less than a year. The plan, which has 10 strategies and 27 specific actions spelled out the countries' commitments with regard to sustainable development.

Mr. Bagadion said the environment officials from Indonesia, Malaysia, Philippines, Singapore, Thailand, and Brunei Darussalam which hosted the 6th ministerial meeting on the environment, all lent their full support to the action plan, thus, the speedy approval.

The ASPEN's objectives are the following:

- respond to the specific recommendations of Agenda 21, the action plan adapted by the United Nations Conference on Environment and Development (UNCED), which required priority action in the region;
- introduce policy measures and promote institutional development that encourage the integration of environmental factors in all developmental processes both at the national and regional levels;
- establish long-term goals on environmental quality and work towards harmonized environmental quality standards for the ASEAN region;
- harmonize policy directions and enhance operational and technical cooperation on environmental matters, and undertake joint actions to address common environmental problems; and
- study the implications of ASEAN Free Trade Area (AFTA) on the environment and take steps to integrate sound trade policies with sound environmental policies.

During the meeting, the ASOEN formed six working committees on six environmental issues such as transboundary pollution, nature conservation, environment conservation, marine environment, environment management, and information and public awareness in order to fully discuss the region's specific concerns.

The action plan calls for the implementation of the following 10 strategies:

- support the development of a regional framework for integrating environment and development concerns in the decisionmaking processes;

- promote government-private sector interactions that lead towards the development of policies that mutually support the thrust of each sector;
- strengthen the knowledge and information data base on environmental matters;
- strengthen institutional and legal capacities to implement international agreements on the environment;
- establish a regional framework on biological diversity conservation and sustainable utilization of its components;
- promote the protection and management of coastal zones and marine resources;
- promote environmentally sound management of toxic chemicals and hazardous wastes and control of transboundary movement of hazardous waste and their dispersal;
- develop a system for the promotion of environmentally sound technologies;
- promote regional activities that strengthen the role of major groups in sustainable development; and
- strengthen the coordinative mechanism for the implementation and management of regional environment programs.

TAIWAN

Council Finds Stores Selling Rhino Horn, Tiger Bone

OW0305144594 Taipei CNA in English 1311 GMT
3 May 94

[By Benjamin Yeh]

[Text] Taipei, May 3 (CNA)—Thirty-seven more Chinese medicine shops around the island were found illegally

selling rhino horn or tiger bone during the second half of April as the Council of Agriculture continued its crackdown on the illicit trade.

Members of the council's special wildlife protection group visited 5,623 Chinese medicine shops in 23 cities and counties from 19 April through 30 April, the council announced on Tuesday [3 May].

The task force seized 349.8 grams of rhino horn and rhino horn powder in 15 stores and 4,424.7 grams of tiger bone in 22 stores.

"The move is to display Taiwan's sincerity to protect endangered species," a task force member said.

Disguised as customers, police visited 519 herbal medicine shops out of 8,000 on the island in mid-March in Taiwan's first nationwide crackdown on the trade. In those raids, 34 stores were discovered to be selling tiger bone and rhino horn.

According to Article 33 of the revised Wildlife Conservation Law, those found guilty of illegally importing, exporting, or trading in endangered wildlife or the products gotten from those animals can be sentenced to up to five years in jail or a fine of up to NT\$ [new Taiwan dollars] 1.5 million (U.S. \$56,820). Repeat offenders could be sentenced to up to seven years or fined up to NT\$2.5 million.

U.S. President Bill Clinton on 11 April issued an order prohibiting the import of legally traded wildlife specimens and products from Taiwan in retaliation for Taiwan's failure to stem the trade in rhino horn and tiger bone.

The sanctions will result in an estimated U.S. \$20 million to U.S. \$25 million in annual losses for Taiwan and will limit exports of farmed crocodile and snake skins, orchids, and coral, local trade officials said.

The sanctions will take effect on 11 May and will continue until December 1994, when the U.S. will review Taiwan's conservation efforts and decide whether to extend the import prohibition.

SLOVAKIA

Environmental Official Discusses Bos Dam Controversy

AU0405073494 Budapest PESTI HIRLAP
in Hungarian 3 May 94 p 9

[Interview with Erno Rozsa, chairman of the Environmental Protection Committee of the Slovak Parliament, by Peter Andor Balazs; place and date not given: "Erno Rozsa Interviewed on the Bos Power Station"]

[Text]

Balazs: You are the chairman of the Environmental Protection Committee of the Slovak Parliament. What is your opinion about Mr. Binder's generous declaration, according to which he would gladly pump water into the Szigetkoz area?

Rozsa: Mr. Binder also made such spectacular declarations before, as if he could solve the problem. These proposals would only be a patchwork, because they do not change the basic problems. The basic problem is that if the two states recognize the fact that the Danube is a border river, they have to also jointly bear its blessings, consequences, and threats alike. It is impossible to divide water up; it is only possible to do something in this direction if one of the sides gives up his share by common agreement. When Julius Binder made his proposals, he did so for the benefit of the common property, but even if his plan succeeded, it would only be a sham solution.

Balazs: The Bos-Nagymaros issue disturbs Hungarian-Slovak relations considerably. However, the Hungarian Green Party is urging the construction of the power stations at Dunakiliti and Nagymaros. What is your opinion of this, as the chairman of the Environmental Protection Committee and as a member of the Coexistence Movement?

Rozsa: The recognition of differences is one of the major principles of Coexistence. A given country is trying to make use of this within its legal system for the benefit of the recognition of national minorities. Therefore, allow me not to interfere in the party struggles and the party concepts of another country. We will only get the guarantee of national minority recognition if we find the proper tone with the government at the given time and the given moment. If I speak about any of the political parties in Hungary, I will

reopen the alleged or real wounds that threaten the constitutional guarantees of recognition of the ethnic Hungarians living here, because we would again be accused of looking at Hungary and being led by Hungary. We could achieve results in the current political situation by not mentioning the facts and events outside the country. We are now preparing a law according to which large-scale projects cannot be carried out without the opinion of the public. The Slovak and Hungarian citizens living in the proximity of the dams should be the ones to express their opinions about the construction projects at Dunakiliti and Nagymaros and, according to these opinions, one could say whether the project is good or bad. I detect a slight lack of responsibility in the fact that the Hungarian Green Party made declarations without being aware of these opinions.

Balazs: What are the harmful environmental effects of the Bos power station on the Csallokoz area?

Rozsa: Opinions differ on the level of the ground water at Csallokoz. Some people say that the level has increased; others say that the level has decreased. It is impossible to find this out in such a short time.

Balazs: Do you find it unfair that while the drinking water of 47,000 people in the Szigetkoz area is endangered, no noticeable damage whatsoever has emerged at the Csallokoz?

Rozsa: We warned the Hungarians in time that the Slovaks would carry out the C version of the power station. You did not believe us at the time. The Slovak leadership made an issue of prestige out of this, and it mobilized all its power to carry out this plan. With the construction of the power station at Dunakiliti, the distribution of water would have been in the Hungarians' hands. But the Hungarians rejected the idea, and thus they are now at the mercy of the Slovak side.

Balazs: What chances of a joint solution do you see in the current situation?

Rozsa: The basic concept of a broad coalition on this issue is that we must settle the conflict with our neighbors. We must negotiate. You must understand that our broad coalition is so diverse that it will be difficult to carry out this process. It is not easy for the right and the left to come to a consensus. The solution can only be found in something similar to what was recently said in Prague, with the participation of the environmental protection committees of nine Central-European countries. National parks should be set up in natural areas divided up by borders, and the affected countries would share the responsibility for them.

REGIONAL AFFAIRS

Southern Cone Environmental Issues

PY0605171594

[Editorial Report] The following is a compilation of reports on environmental issues monitored through 5 May:

ARGENTINA

The Naval Prefecture reported on 25 April that more than 20,000 liters of diesel oil spilled into the sea after the Capitan Rey tug collided with the Alvimara II fishing vessel at the port of Ingeniero White, in Bahia Blanca. (Buenos Aires NOTICIAS ARGENTINAS in Spanish 1904 GMT 25 Apr 94)

BOLIVIA

The Titicaca Lake Subregional Organization has reported that the Peruvian city of Puno is responsible for 80 percent of the Titicaca Lake contamination. It stated that despite efforts, the pollution level continues to increase, and many species of bird and fish could die out. (La Paz PRESIDENCIA in Spanish 14 Apr 94 p 6)

The Oruro Development Corporation will clean up the Uru-Uru and Poopo Lakes, which have been contaminated by mining activities for many years. Agronomist Jaime Ramirez Velazquez, the Fishing Development Center deputy director, said that the intense mining activity has completely destroyed the flora and fauna through the indiscriminate dumping of chemicals into the lakes. (Cochabamba LOS TIEMPOS in Spanish 26 Apr 94 p A10)

BRAZIL

The first aeolic power plant will begin operation on 27 April in Serra do Camelinho, in the municipality of Curvelo, Recife, Pernambuco State. The plant will supply the energy through the Minas Gerais Power Company. Researcher Everaldo Alencar Feitosa said Brazil has the aeolic power production technology. The Federal Universities of Pernambuco, Rio Grande do Sul, Parana, and Rio de Janeiro have conducted advanced studies on this alternative power source. (Rio de Janeiro O GLOBO in Portuguese 25 Apr 94 p 14)

Brazilian and National Aeronautics and Space Administration experts detected in October that the level of gas concentration in the ozone layer dropped between 15 to 20 percent over Santa Maria, Rio Grande do Sul State. Previous studies conducted by the National Institute of Space Research, INPE, showed that the ozone layer concentration was high in Brazil. (Sao Paulo FOLHA DE SAO PAULO in Portuguese 26 Apr 94 Third Section p 3)

The National Environment Council on 4 May approved a resolution forbidding the import and export of radioactive products "of any type, under any circumstances, and for any purpose, including recycling." The resolution will become effective 90 days after its publication in the official gazette. It states that importation will be allowed only "in extremely necessary cases." (Sao Paulo O ESTADO DE SAO PAULO in Portuguese 5 May 94 p A18)

The Brazilian Institute for the Environment and Renewable Natural Resources, IBAMA, has issued a resolution stating that large-scale shrimpers will be compelled to use the Turtle Escape Device as of 7 May to avoid the accidental capture of turtles. Offenders will be fined or will have their catch confiscated. (Sao Paulo GAZETA MERCANTIL in Portuguese 2 May 94 p 14)

CHILE

Brazil and Chile are promoting a regional project in the city of Punta Arenas, 2,244 km south of Santiago, to measure ultraviolet radiation and its effects on the ozone layer with the help of balloons. The Punta Arenas Regional Council is partly financing the project in which academic organizations and the INPE are also participating. The balloons will measure the thickness of the ozone layer in Punta Arenas and in a great area of the Antarctica. (Madrid EFE in Spanish 2017 GMT 26 Apr 94)

PARAGUAY

On 20 April, Industry and Commerce Minister Ubaldo Scavone dedicated a facility at the Cimplast Company which will produce biodegradable plastic packing material. A local firm has ordered 7,000,000 PVC jars in which to export instant coffee to the European market. (Asuncion ABC COLOR in Spanish 21 Apr 94 p 14)

PERU

A fracture in the Nor-Peruano oil pipeline is seriously contaminating a vast jungle area of the Loreto Region with serious consequences for the flora and fauna. Approximately 10,000 barrels of oil per day are being spilled into the Marañon River, a tributary of the Amazon River. (Lima LA REPUBLICA in Spanish 14 Apr 94 Political Section p 5)

BARBADOS

Greenpeace Criticizes SIDS Conference

FL0505005594 Castries HTS Caribvision Television in English 1945 GMT 4 May 94

[Text] The historic global conference on Sustainable Development of Small Island Developing States [SIDS] continues to be plagued with controversy. One of the environmental groups, Greenpeace, currently attending the conference, says the SIDS conference is not addressing important environmental issues. Anna (Toney), the head of the Greenpeace delegation, now in Barbados, spoke with Michelle Arthur about this matter.

[Begin recording] Arthur: According to Miss (Toney), the [word indistinct] conference is not adequately dealing with environmental issues. She says that the real conference promises were made to host the conference on sustainable development [words indistinct], but what is happening is Barbados is another talk shop.

Toney: Two years later, we come here to Barbados, and yet again a lot of rhetoric, and I really do believe that there be threats of environment [words indistinct] development are so big that they can no longer wait, so [words indistinct]

action plan do germinate some of the issues with very much concern such as climate change, such as [word indistinct] (bleaching), fisheries and others, we really hope the developed countries will try to give in much more on the international side of the action plan because it is all very well to tell the small developing states what they should be doing at home when you know that they do not really have to contribute too much for the environmental problems they are now facing [as heard].

Arthur: The Greenpeace delegate is also concerned about the amount of paper and plastic materials used at the UN conference. She said the number of press releases and plastic cups and plates being used should be reduced. Greenpeace also plans to meet with the Barbados fishing community within the next few days. Miss Toney says there are many common problems facing the fishing communities all over the world. The Greenpeace ship is now docked in Barbados. [end recording]

BOLIVIA

Growing Presence of Colombian Cartels Threatens Ecosystems

PY0505031494 Santa Cruz EL MUNDO in Spanish
29 Apr 94 p 13

[Text] ANF—At an international antinarcotics conference that has been under way in Quito, Ecuador, since last week, Social Defense Secretary Mario Soliz said that the Colombian cartels, and mainly the Cali cartel, are establishing themselves in Bolivia to produce cocaine on a large scale.

"We could be facing the imminent and increasing transfer of foreign criminal drug organizations to Bolivia," said Soliz, in a speech before the 12th International Drug Enforcement Conference (IDEC).

He said that the drug trafficking organizations, and especially those from Colombia, are able to subjugate the most important indigenous organizations in gaining control over the entire drug circuit, from producing coca to cocaine paste, refined cocaine, and the export and marketing of pure cocaine.

He added: "The Colombian drug rings hope to establish their own supply system for the chemicals they need, as it is known that they want to complete the circuit by refining their own production."

Soliz said that to estimate the presence of illegal chemicals in Bolivian territory "is a frightening exercise, as the huge border regions shared with our neighbors are the natural habitat for unique species of animals and plants, with rivers full of an impressive variety of fish, and with fertile land suitable for all manner of cultivation."

Soliz added: "This entire habitat where ancient ethnic groups live, forming a natural ecosystem, alive and without contamination, is now in danger due to the voracity of drug traffickers and their suppliers of chemicals."

BRAZIL

Lamprea To Chair WTO Group on Trade, Environment

PY0205203694 Rio de Janeiro O GLOBO in Portuguese
30 Apr 94 p 28

[Report by correspondent Deborah Berlinck in Geneva]

[Text] Brazilian Ambassador Luiz Felipe Lamprea was yesterday elected chairman of a group of countries that will propose a number of recommendations on trade and environmental issues to the future World Trade Organization (WTO). These issues could generate a great many controversies for the future organization, as several countries, Brazil included, are afraid that some countries, like the United States, could use environmental protection to erect new protectionist barriers.

The WTO, which will start functioning in January 1995, will regulate all of the agreements reached during the Uruguay Round of the GATT talks and approved this month in Marrakech, thus putting an end to the most ambitious global GATT negotiations to liberalize world trade in history. The idea of the group led by Brazil is to pave the way for the WTO to reach an agreement to reconcile the requirements contained in the many environmental protection treaties, including those approved in the Rio-92 Conference, with trade regulations.

This will not be an easy task: American environmentalists, for instance, do not want the issue discussed at the WTO, claiming that trade interests will prevail and that environmental standards will suffer. It is the pressure of these environmentalists that is forcing shrimp catchers in the Brazilian northeastern region to install a new device in their fishing nets to avoid the risk of killing turtles while catching shrimp. A U.S. law protecting turtles enables the U.S. Government today to ban imports of Brazilian shrimp.

In 1991, the United States banned imports of Mexican tuna fish over the use of inappropriate nets that were risking the lives of dolphins. The case was taken to GATT, but Mexico itself withdrew the case later when it was trying to join NAFTA.

CHILE

Frei Proposes Enhancing High Seas Presence, Fishing Laws

PY0705034194 Santiago EL MERCURIO in Spanish
3 May 94 p C2

[Report by Hernan Cisternas Arellano in Valparaiso]

[Text] Chilean President Eduardo Frei Ruiz-Tagle last night announced the government's decision to propose initiatives that would enhance Chile's presence on the high seas and would give credence to the government's intention to protect marine areas falling within the national jurisdiction.

Frei said that the government is aware that the sea is one of the bases for national development, and he thus wants to act accordingly in that area.

He noted that the government will decisively support the modernization of the Navy, which plays a key role in safeguarding Chilean sovereignty, in effectively patrolling the sea, and in protecting Chilean rights on the high seas.

Frei said that he would continue to develop a comprehensive fishing policy, which at this stage should reinforce its administrative mechanisms to promote equitable access to these resources and make rational use of them.

Frei announced publicly that he is committed to creating the conditions for and facilities to bring about the adequate improvement and development of the ports, which he characterized as the backbone of Chile's maritime presence. In this regard, he emphasized the decision to incorporate the private sector in developing these ports.

Frei was the only speaker last night at the opening ceremony of the Month of the Sea celebration. He thus became the first chief executive to open this celebration since it was instituted 20 years ago by Admiral Jose Toribio Merino, retired.

Attending the ceremony, which was held at the Playa Ancha naval auditorium, were Defense Minister Edmundo Perez Yoma; Secretary General of the Presidency Genaro Arriada; Transport Minister Narciso Irueta; Chamber Speaker Jorge Schaulsohn; Navy Commander Jorge Martinez Busch; General Richard Quass, representing the Army; General Jose de la Fuente, representing the Air Force; General Fernando Cordero, representing the Carabineros; and members of the Navy high command, among other officials.

Frei stated that there have been contradictory interpretations of the right to fish on the high seas, which have led to the abusive depredation of resources and environmental degradation.

He called for an international regulation process to prevent this sort of abuse without affecting the fundamental freedom to fish or the high seas laws, and without aspiring to an extension of the national maritime jurisdiction.

Frei pointed out that the Convention on Sea Rights grants the country having the coastline the sovereign rights to explore, exploit, preserve, and administer natural resources within its exclusive economic zone.

He added, however, that regarding the shared fish species, these rights lose their validity because the country having the coastline has no ability to preserve and administer the said resources found beyond the 200 mile zone.

Frei explained that in order to improve the legislation on the high seas, which are conceived of as an asset for the public good, the objectives of Agenda 21 approved at the Rio-92 summit must be taken into account.

On this basis Frei pointed out that Chile has a five-point proposal which, as its first step, calls for international

acceptance of the UN Convention on Sea Rights, which has been paralyzed as a result of disputes over ocean mining.

The said proposal considers first of all the negotiation of an international convention on the preservation of fish species that live in various zones and are highly migratory.

CUBA

Foreign Minister Holds Bilateral Meetings in Barbados

FL0605020494 Havana Radio Rebelde Network in Spanish 2300 GMT 5 May 94

[By special correspondent to Barbados Gisela Bel Heredia]

[Excerpt] [Passage omitted on previously filed material] Cuban Foreign Minister Roberto Robaina also held bilateral meetings with members of the delegations from Trinidad and Tobago, Antigua and Barbuda, Barbados, and Guyana; and in all cases, the support of Cuba and the rejection of the blockade have prevailed. Likewise, the delegates conveyed positive expressions of support to Cuba's entry into the Association of Caribbean States.

At the conclusion of the first day of work by the highest-level members of the conference delegations, the path to the Declaration of Barbados and the action plan has been paved. These documents will be approved at the closing of the conference's debates.

The need to defend our natural resources and to establish policies to enhance the environment, and the quest for ways that lead to the survival of the small insular states are the main prevailing proposals in this conference.

According to the agenda, the first Global Conference on Sustainable Development will conclude tomorrow. This conference has been going on in the capital of Barbados since 25 April. Over the past two days, several chiefs of states and of governments have joined experts and active members of various organizations participating in this conference.

Castro Speaks on Environmental Issues in Barbados

FL0505222794 Havana Radio Reloj Network in Spanish 1932 GMT 5 May 94

[Text] There cannot be sustainable development for a part of the world, and underdevelopment for the rest. This was said by Cuban President Fidel Castro on 5 May at the First International Small Island Nations Conference. In his address to the plenum of the summit, comprising approximately 50 delegations in Barbados, Fidel pointed out that the problem of sustainable development will not be solved unless there is a more equitable distribution of the world's wealth.

Fidel added: We are islands a few meters above sea level. We ask ourselves what will happen when the water level rises, and whether we will be able to withstand the droughts, hurricanes, and other weather disasters awaiting

us. Fidel also pointed out: We are not responsible for this; others colonized and exploited us. Consumer societies have destroyed the environment.

Commander in chief Fidel Castro today emphasized that while annual per capita income of Switzerland is \$34,000; Bangladesh, with over 100 million habitants, and in danger of disappearing underwater, has a per capita income of barely \$210. Castro said this during the 5 May session of the First International Small Island Nations Conference being held in Bridgetown, Barbados.

Castro added that the arms race continues, weapons sales are on the increase, the most powerful nations sell the most weapons, and do not mind profiting from the deaths of others. Why should they care about the environment and the fact that islands are sinking underwater?

All the heads of state and government present in Barbados are participating in today's meeting; they are scheduled, on 6 May, to approve a program for action on sustainable development for small island nations.

INDIA

Calcutta Called Nation's Most Polluted City

*BK0605144994 Delhi INDIAN TODAY in English
15 May 94 p 162*

[Article by Soutik Biswas]

[Text] "Is clean air a luxury we can't afford any more?" That was the plaintive question raised by a citizen's body, People United for Better Living in Calcutta (PUBLIC), in its posters and hoardings on the eve of Earth Day last fortnight. The answer may already be a resounding "yes" as a startling new study by the renowned School of Environmental Studies at Calcutta's Jadavpur University reveals.

The study released last month clearly establishes that Calcutta's air is the most poisonous in India. In the process it demolishes the widely held view that Delhi's air is more polluted than Calcutta's. Now the levels of noxious sulphur dioxide and nitrogen oxide in Calcutta are at least four times more than those of the country's capital. The overall suspended particulate matter in Calcutta's atmosphere is three times more than that present in Delhi.

For Calcuttans, to whom choking comes as naturally as breathing, this dubious distinction may come as no surprise. There are 11,516 factories, both small and large, spewing poisonous gases into the city's air. And adding to the lethal cocktail are the exhaust fumes of some 5.25 lakh automobiles. Yet, remarkably, the most serious source of urban atmospheric pollution may well be a 'traditional' one: the coal burning chullahs on which about 70 percent of the city's population rely for their cooking.

For the past 10 years, a team of scholars from Jadavpur University's School of Environmental Studies led by its director, Dr. Dipankar Chakraborti, have been studying air pollution in Calcutta during the peak winter months—from the end of October to February—when the city turns into a veritable gas chamber.

The study found that the concentration of most pollutants (such as sulphur dioxide, nitrogen oxide and carbon monoxide) had shot up alarmingly over the past seven years, but

the rise in the level of one indicator—suspended particulate matter—was particularly sharp. This rose from 800 micrograms per cubic metre (mpcm) in 1987 to 1,325 mpcm in 1994. Researchers were particularly disturbed to find that a significant proportion of the particulate matter count was made up of benzene soluble organic matter (BSOM), which can be highly toxic and frighteningly carcinogenic.

Calcutta's pollution counts are all the more alarming when compared to those of the world's other smog capitals. In the winter of 1993-94, the average concentration of benzene in Calcutta's air was found to be more than 500 mpcm as against Los Angeles' figure of only 80 mpcm. While Los Angeles' vehicular concentration is unparalleled, Calcutta's chullahs more than make up for this. "The dangerous benzene source is not the automobile exhausts alone," says Dr. Chakraborti. "This is also due to the rampant coal burning in the city." However, another alarming revelation—the abnormally high organo-lead concentration in the city's air which is more than four times that of Los Angeles or London's, has been linked to Tetraalkyllead used in petrol.

While the noxious substances lacing Calcutta's air are known to be harmful, no studies have so far been conducted to determine the effect of atmospheric pollution on public health in the city. And perhaps many Calcuttans would rather spare their nerves than hear about the long term risk of cancer, or of the teratogenic (gene altering) pollutants they breathe. But there's no escaping the rising levels of asthma and other bronchial disorders that are already plaguing the city's residents.

The only silver lining in this dark pall is the fact that Calcutta's air pollution levels dip sharply during the monsoons when wind and rain scrub the skies clean for a while. But given the extent of the pollution in the five months after October, this is little consolation.

Clearly, it's time for panic stations, and the March for Clean Air by Calcuttans last fortnight was a timely effort. But before the city of palaces and gardens turns into a permanent gas chamber, the citizens and the Government need to combat the menace on a war footing.

RUSSIA

Chelyabinsk Oblast Environmental Situation Viewed

94WN0266A Chelyabinsk CHELYABINSKIY
RABOCHIY in Russian 22 Mar 94 p 2

[Interview with V. A. Bakunin, chairman of the Oblast Committee on Ecology and Rational Use of Nature, by M. Fonotov; place and date not given: "Ecology of Decline"]

[Text]

Fonotov: Vasily Aleksandrovich, in line with established tradition we must make our fourth summary of the ecological year, this time for 1993. In order to start a fire it is necessary to toss in some statistical firewood. Please give us some figures for last year. Let us start with the atmosphere. Is the air we breathe cleaner? Are discharges into the air basin of industrial enterprises decreasing? Please.

Bakunin: I will cite some figures not just for last year, but for the five-year period—our committee was created five years ago.

Thus, in 1993 discharges from stationary sources went down 13.9 percent, or by 256,000 tonnes. That is the highest index in recent years.

Here are more details: Some 2,624,000 tonnes of harmful substances were discharged into the atmosphere in 1988, whereas in 1993 it was 1,883,000 tonnes. Over five years the decrease amounted to 741,000 tonnes.

Fonotov: That is almost as much as was discharged five years ago by Magnitogorsk. This is impressive! But let us return to 1993. Interpret the discharges in that year.

Bakunin: The following picture appears. Out of 256,000 tonnes—that was the decrease in discharges last year, only 40 percent was accounted for by implementation of measures for the protection of nature.

Fonotov: What about the rest?

Bakunin: The other 60 percent was accounted for by curtailment of production.

Fonotov: For example?

Bakunin: For example, Magnitogorsk, which was mentioned. Last year enterprises in the city discharged 434,000 tonnes into the atmosphere. If one recalls, it used to be 856,000 tonnes. The Sintering Plant No 1, Open-Hearth Shop No 3, and open-hearth furnaces No. 3, 5, 30, and 31, as well as blast furnace No. 3 along with the coke furnace batteries, and other facilities were closed down.

Fonotov: What about Chelyabinsk?

Bakunin: The decrease in discharges in Chelyabinsk last year was limited. Just 49,000 tonnes. Only 4,600 tonnes of which was accounted for by measures for the protection of the air. The rest also resulted from a cutback in production

Fonotov: The notorious ESPTs-1 [Electronic Steel Smelting Shop-1] at the metallurgical combine has finally been stopped.

Bakunin: Yes. It was mothballed as of 15 February of this year.

Fonotov: What does mothballing mean?

Bakunin: It means that operation was halted but the equipment was not removed. What happens with the shop in the future is up to the combine.

Fonotov: How about the workers?

Bakunin: The workers were transferred to other sectors, but apparently even the ChMK [Chelyabinsk Metallurgical Combine] will not be able to avoid manpower cuts.

Fonotov: Something else has closed in Chelyabinsk?

Bakunin: Of course. Some of the equipment at the ChEMK [Chelyabinsk Electrometallurgical Combine], the tube rolling-plant, the Stankomash, the abrasives combine, the Kolyushchenko Plant, and elsewhere has been taken out of operation. At the same time emissions increased at the TETs-1 [Heat and Power Plant] and TETs-2 as natural gas is replaced with coal. The consumption of gas also went down in the city as a whole because of production cuts. That is why the city and oblast administration appealed to the government with a request to increase the delivery of gas to the power engineers, but Moscow is yet to respond.

Fonotov: Can you also name some other cities?

Bakunin: I can. The Troitsk GRES [State Regional Electric Power Station] diminished discharges by 63,000 tonnes, but unfortunately, also through a decline in the generation of electric power. The volume of emissions decreased in Satka and a number of other cities.

Fonotov: What about Karabash?

Bakunin: Karabash decreased its discharge tenfold last year and even more now. In essence that combine has been stopped. The city was left with no work to do.

Fonotov: About the ecology of 1993 it will probably be possible to say that this was the ecology of production cutbacks. The closing down of furnaces, shops, and entire plants, of course, promoted a healthier environment. At one time, however, we were not counting on that kind of "success." You must remember, of course, how strongly Chelyabinsk workers demanded the closing of the ESPTs-1 at ChMK. So many angry words were spoken, so many accusatory petitions were compiled! The ESPTs-1 is now closed but no rejoicing because of that is heard.

The decrease in production blunted the problem of ecology but did not eliminate it, merely postponing it. The best solution probably lies in the replacement of old manufacturing methods with new ones. Vasily Alkesandrovich, how do you and your committee view the idea supporting a revival of Karabash as proposed by the Klyuch Joint-Stock Company?

Bakunin: It is a good idea. We reviewed the proposed manufacturing methods and approved them. They are

suitable not only for Karabash but for all of the other metallurgical centers which have accumulated mountains of waste products. But there are no funds. It would seem that only limited funds are needed to start but even that is not available. The oblast administration and the oblast ecological fund appropriated some money but without government help such a project is apparently impossible.

Fonotov: I want to ask you about another "famous" facility—the ESPTs-6 at the ChMK. As we all know the construction of that shop was received by city residents in a rather ambiguous manner. Then interest in it vanished. What is its fate? Is it being built or was it "frozen?"

Bakunin: The working committee accepted ESPTs-6. In the immediate future the facility should be accepted by the state commission. In other words, the shop is ready. However it is difficult to predict its fate under the new conditions. It is apparently a complex situation.

Fonotov: Last year only a few scrubbers, filters, and other installations for the protection of the environment were built. That is understandable. The economy is concerned with other matters. Does this mean that ecology will be of secondary concern this year as well?

Bakunin: In the course of the year it was necessary to carry out 41 measures. We are speaking about such cities as Plast, Verkhniy Ufalet, Vishnevogorsk, Satka, and Bakval.

Fonotov: And in Chelyabinsk?

Bakunin: In Chelyabinsk practically nothing was completed. It is sufficient to say that a gas scrubber for ESPTs-3 furnaces has been under construction for many years at the ChMK. The reason for that is a lack of funds.

Fonotov: But it is said that enterprises are paying a lot for polluting the environment?

Bakunin: That depends on the viewpoint. What does "a lot" mean? The standards were introduced in 1991, before August 1993 they were merely doubled. This year it is expected that they will be increased tenfold. During that period, however, the cost of production went up by a factor of over a thousand.

Last year enterprises paid around two billion rubles into the oblast ecological fund. A fourth of that was transferred by us into the federal fund. About another three billion rubles went into city and rayon funds. Judge for yourself whether that is a lot or not.

We spent over a billion rubles on the financing of facilities for the protection of the environment. The rest was spent on scientific research work and ecological propaganda. We helped the agricultural engineering and state universities establish departments of ecology.

Fonotov: The enterprises, however, are idle and it is awkward to pressure them.

Bakunin: It is, nevertheless, necessary to apply pressure, of course, when there is a real possibility of decreasing harmful emissions. If we did not pressure and fine managers the results would be different.

Fonotov: Now another traditional question about monitoring. I am talking about an automatic air quality monitoring system in Chelyabinsk and other cities. Is there any progress?

Bakunin: There is. The first monitoring station is located on our committee building—the sensor is on the roof of the building. Hourly monitoring of radiation is carried out. We also receive data on radiation conditions at Chelyabinsk-65 and in Kyshtym. Kaslinsk, Kunashaksk, and Argayashsk rayons are next.

Furthermore, the administration of Chelyabinsk established three chemical air-quality monitoring stations at the expense of its ecological fund. They are now being adjusted and calibrated.

As commonly known this work is being done by the KBM [Miass Design Bureau] of the city of Miass.

Fonotov: We have said something about the air. It is necessary to mention the water as well.

Bakunin: Work on purification of wastewater has not stopped but is being carried out with a lag in the fulfillment of the program. A circulating system was created at the Ashinskiy Wood-Chemical Plant. The intake of water from the Sim River was decreased. A circulating water supply system is under construction at the Kyshtym Machinery Plant. Reconstruction of purification structures at Kartaly has been delayed. Afterpurification structures on the right bank at Magnitogorsk have not been completed. It is time to place into operation purification facilities at the settlement of Fershamlenhuaz, at the Kragayskiy Bor rest home.

There is only one reason which is a lack of money. Nevertheless we shall strive for the introduction of those facilities in 1994.

Fonotov: How did we protect the forests last year?

Bakunin: We are devoting every effort in order to preserve forest resources because the forest in the Ural is not only raw material but first of all, pure air and clean water. Five years ago 2,200,000 cubic meters of timber were felled, while last year it was 1,500,000 cubic meters. We achieved such a decrease in felling through the creation of water reservoir and river forest shelter belts for water conservation. Two national parks, the Taganay and Zyuratkul parks, were opened with our cooperation. In addition to that, on the basis of our order the Yekaterinburg Forestry Institute studied the question concerning optimal age for coniferous forest clearing. It turned out that pine trees in the Ural should be felled starting with their 121st year, and not 20 years earlier. All that made it possible to substantially decrease felling and preserve the most valuable forests in the mountainous portion of our oblast.

Fonotov: You mentioned new national parks. How is their development progressing?

Bakunin: The directorate of the Taganay Park has started functioning. The decision regarding opening of the Zyuratkul Park was adopted at the end of last year but no funds have been allocated thus far. Initially our ecological fund

allocated eight million rubles. One must hope that this year the forestry committee will initiate the financing of Zyu-ratkul Park.

Fonotov: Contradictory reports have appeared in the newspapers that the Ilmsk Preserve and the institute of mineralogy are being merged. What is the position of the committee with respect to that matter?

Bakunin: This is a sore subject. The thing is that the Ilmsk Preserve has always been a preserve and was never renamed while the Ural Branch of the Academy of Sciences decided to create the Ilmsk Preserve Scientific Association. In doing so it committed a number of legal blunders. By registering the association the administration of the city of Miass deprived the Ilmsk Preserve of its status as a preserve. Now it is an association governed by its own laws. The danger is that we might lose the Ilmsk Preserve.

Fonotov: So the dispute boils down to some finer points of the law?

Bakunin: Yes, but these are very important points. The issue was discussed at various levels a number of times but no final solution has been found. As far as I know the legal service of the oblast administration plans to appeal for arbitration requesting repeal of the decision of the Miass administration. On its part our committee has appealed to the Ministry for Environmental Protection with a request to "accept" the Ilmsk Preserve into its agency. We proceeded from the fact that out of the 47 preserves in Russia, 41 are under the jurisdiction of our ministry.

In other words the Academy of Sciences had no right to reorganize the preserve. That can be done only by the government.

Fonotov: As I understand it neither side wishes to harm the preserve and, quite on the contrary, all are concerned for its well-being—why the conflict?

Bakunin: It is necessary to be very cautious with respect to this issue in order to avoid a mistake. The bylaws of the scientific association states that taxes on entrepreneurial activity will go into the budget of Miass. But what sort of entrepreneurial activity is that if preserves are not permitted to engage in it? At the same time there is some information that there is already trade in stones. Plans are being made for the building of ski runs and for construction of some kind of a laboratory with 25 residents, without our knowledge, on Miassovo Lake.

Fonotov: If the government refuses to maintain the preserve perhaps it should make some effort on its own in order to survive?

Bakunin: That is what we are telling the scientists—if you do not have the money to maintain the preserve, transfer it to our ministry.

Fonotov: It appears that the preserve might be lost because of the word "association."

Bakunin: Exactly. The preserve belongs to the government and cannot be privatized. At the same time an association can be privatized and it could be, for instance, a joint-stock company.

At any rate, the question concerning the preserve must be resolved by the government.

Fonotov: Our conversation is coming to an end. It is possible to think that the public has lost interest in ecology. Is that good or bad?

Bakunin: Of course that is bad. In former years the public raised and helped to resolve many questions dealing with protection of the environment. That is not the case any longer. Everyone is concerned with day-to-day worries and does not look too far ahead. Our committee, however, will continue to work on improving the environment. Particularly since in the difficult time of reforms the tendency toward its improvement is preserved. Revival of the economy, in turn, will create conditions for renovation of equipment and assimilation of modern ecologically clean manufacturing methods.

Russia To Include Ecology Provision in DPRK Logging Accord

SK0205042094 Seoul YONHAP in English 0239 GMT
2 May 94

[Text] Seoul, May 2 (YONHAP)—Russia is reportedly poised to include an environmental conservation provision as well as human rights protection in its new logging agreement with North Korea amid criticism over serious environmental depletion at Pyongyang-administered logging camps in Siberia, a Foreign Ministry official here said Monday.

International environmental groups have revealed that forests in the area have been severely damaged due to poor afforestation by the North Korean logging camps, the official said.

Russia will therefore push for a provision toughening environmental regulations as well as human rights protection in its new logging contract with North Korea, he said.

Pyongyang and Moscow are negotiating renewal of the contract, which expired at last year's end, but North Korea's unwillingness to accept the human rights protection provision is posing a hurdle.

"International environmental groups are warning that if logging continues in Siberia, there will be major environmental problems since the Siberian forests are one of the world's major oxygen suppliers," the official said.

Greenpeace International says more than 15,000 North Korean workers at the logging camps randomly kill wild animals, including bears.

The current North Korea-Russia logging agreement has a provision on afforestation after logging, but Moscow wants to toughen regulations, the official said.

Minister Says No Agreements To Import Radioactive Waste

LD3004124594 Moscow Radio Moscow World Service in English 1100 GMT 30 Apr 94

[Text] Russia has no agreements on the import of radioactive waste generated at the nuclear power plants built with the help of the former USSR, Russia's Environment Minister Viktor Danilov-Danilyan told a news conference in Moscow. The minister pointed out that the law on environmental protection, brought into effect at the beginning of 1992, categorically bans the import of radioactive waste for dumping. He denied speculation that at the recent talks with his Norwegian counterpart, Thorbjorn Berntsen, agreement was reached to build a repository for radioactive waste from Norway in the Russian north.

Agreement With Japan on Joint Processing of Nuclear Waste

LD2904141994 Moscow ITAR-TASS in English 1014 GMT 29 Apr 94

[By ITAR-TASS correspondent Eduard Popov]

[Text] Vladivostok April 29 TASS— Russia and Japan decided to build facilities in the Maritime Territory to store and utilise liquid radioactive waste. The decision was taken as a result of work by a Russian-Japanese intergovernment commission on settling one of the most pressing far eastern problems: storage and processing of liquid radioactive waste in the Maritime Territory.

Commission Member Yevgeniy Stomatyuk, chairman of the territorial committee on natural resources, told a news conference in Vladivostok on Friday that the two sides reached agreement to build a mobile facility in Japan in the near future.

It will store liquid radioactive waste from Russian nuclear-powered submarines till a stationary system for utilising waste is built.

The final discussion of the two projects will be held in Moscow and Tokyo at the top level. Their bilateral implementation will start in the latter part of May.

Better Recycling of Power Station Ash Urged

Pm2904134994 Moscow ROSSIYSKAYA GAZETA in Russian 28 Apr 94 First Edition p 2

[Article under the "Ecology" rubric by Candidate of Economic Sciences Igor Dubov, President of the 'Ekoresurs' Intersectoral Economic Association: "Would That I Had Mountains of Gold and Tax Concessions. More than A Billion Tonnes of Solid Waste Poisoning the Environment"]

[Text] An inadvertent misprint once revealed surprisingly accurately the nub of the problem: The words "ash waste" ["zoloshlakovyye otkhody"] had been replaced by the words "gold waste" ["zolotoshlakovyye otkhody"]. Indeed, if the solid waste of thermal electric power stations is divided into its different elements and projected onto

Mendeleyev's table they would cover it so comprehensively that some gold-bearing veins might seem a lot poorer. These waste products contain gold, silver, and such rare metals as germanium, vanadium, strontium, scandium, and lithium. Around 96 tonnes of gold alone could be extracted from the waste produced at our thermal electric power stations!

Prior to 1989, when the problem of recycling ash waste was under the state's control, the curve showing the volume of recycling rose constantly, reaching a figure of 16.3 million tonnes for the USSR as a whole or 15 percent of annual production (the figure abroad is around 55 percent). This work was included in our national economic plan and centralized capital investments were allocated to the development of reprocessing capacities.

In recent years, however, because of the lack of effective rules governing market mutual relations, the curve showing the recycling of ash waste in Russia has begun to steadily decline. Last year just 3.0 million tonnes or around 7 percent of annual output was reprocessed. In all there are more than 1 billion tonnes of solid waste accumulated in waste dumps at thermal electric power stations, which occupy over 20,000 hectares of land.

When the discussion turns to state regulation, many people for some reason take this to mean a return to the old ways, to a rigid system of planning, to the budget financing of all and sundry, strict executive discipline, and so forth. State regulation as we understand it (for the transitional period) means movement toward full-fledged market relations in which the system of direct economic benefit works faultlessly. But for this system to begin operating the state and the local authorities must adopt the necessary legislative and legal acts.

For example, the corresponding taxation must be used to practically close off access to natural resources if they can be replaced by ash waste without causing a deterioration in the technical characteristics of output. Preferential taxation and credit can be introduced for enterprises which reprocess those waste products. State regulation or, more accurately, state participation would also include an insignificant proportion of budget financing, which the state would use for scientific research and experimental design work of a problematic intersectoral character, and in the sphere of capital investment for the creation of pilot projects for the reprocessing of major quantities of these waste products measured in tonnes. Statistical accounting and the radiation safety of the use of ash waste must be kept under state patronage, as must other questions affecting society's interests.

The conclusion is obvious: The problem must be resolved at federal level and the interests of the components of the Federation must be taken into account. The "Ekoresurs" Intersectoral Economic Association, founded at the end of 1990 by the USSR Energy Ministry, the Moscow City Soviet Executive Committee, and energy and science-and-production associations, produced a number of proposals which it put to the government in August 1992. They

formed a basis for the study of the subprogram "Reprocessing of thermal electric power station ash waste products" within the federal targeted program "Fuel and Energy." This is where regional and federal interests were brought together. If the regional measure envisages the construction of a reprocessing enterprise with a capacity of over 500,000 cubic meters of waste a year, it is the opinion of the authors of the subprogram that it has the right to expect the support of the federal authorities—in the form of budget financing or preferential taxation. Only the urgent creation of multi-tonne reprocessing capacities can halt the catastrophic accumulation of waste products and reduce their negative impact on the natural environment.

As for economic efficiency, in a cost-based economy where the cost price of materials was included in the volumes of work and affected the fulfillment of the set plan, trying to force the construction industry to use cheap ash waste materials instead of costly materials (sand, ballast, or gravel) was virtually impossible. It is only now, even with only local tax regulators, that it is possible to implement a policy for the extensive replacement of natural inert and bonding materials with ash waste products.

In December 1993 the government approved the draft federal targeted program "Fuel and Energy." The Russian Ministry of Fuel and Energy was defined as the state client of the subprogram "Processing of thermal electric power station ash waste products" with the "Ekoresurs" Intersectoral Economic Association defined as the executor and at the same time its author. The subprogram does not envisage state dependence. No more than 15-20 percent of the total volume of expenditure should be borne by the federal authorities. All the rest is to come from non-budget funds, first and foremost ecological funds, from bank credits, and from enterprises' own resources. The final say in this matter should belong to the Federal Assembly, which is empowered not only to ratify the indicators in the subprogram but also to adopt the law "On solid waste resulting from production and consumption," which Russia urgently needs.

Seminar on Safe Transportation of Radioactive Materials Held

94WN0242B Moscow *SEGODNYA* in Russian
17 Mar 94 p 9

[Article by Anton Trofimov under the heading "Experience": "Payment for Fear: The Problem of How To Transport Radioactive Materials Exists Both in Russia and in the West"]

[Text] The issue of how to safely transport uranium and other radioactive substances is a timely one and, contrary to popular opinion, not just for Russia, though for fairness' sake it should be noted that the problem is more acute here. This was the subject of discussion at a seminar entitled "Transportation of Uranium," sponsored by European Union experts and the Uranerz Consortium. The seminar was held at the Voronovo Resort near Moscow and was the second in a series, with the first held at the same site in later June and early July of last year.

Western experts, concerned with the state of affairs in Russia, are attempting to demonstrate how they are solving the problems involved in ensuring safe transportation of ionizing sources, to understand what Russian specialists can do in that direction right now and, eventually, to find a way to integrate our country's safety system (which remains to definitively take shape) with the Western system.

The corresponding agencies in the West, both national and international, pay particular attention to the development of monitoring measures to prevent incidents during transport and to mitigate their effects. Among those measures are development of design standards both for the means of transportation and the transportation routes. Standards have also been developed for special transport containers which, as is well known, can cause the greatest unpleasantness if they are not built according to the necessary standards. In the West these "packages" undergo appropriate testing. For example, drop tests, compression, depth testing, resistance to physical damage, heat resistance and water resistance. Our country's containers currently undergo the same tests, but as of the fourth quarter of this year Russia will have new regulations specifying container standards. Furthermore, Russian experts are of the opinion that current standards should be stricter than those approved by the International Atomic Energy Agency in 1985.

However, these issues are more specific than general. The latter type of issue includes things like the creation of a unified system to ensure safe transportation of radioactive materials in Russia and development of procedures to be used in the event of the worst-case scenario: a transportation accident. Even though fortunately thus far neither Russia nor any other place in the world has experienced a single serious incident, the danger is always there. Toward this end Western specialists have drawn up accident plans regulating actions by all organizations at every stage of clean-up efforts. Now Russian specialists have had an opportunity to familiarize themselves with those plans, and one would hope that Russia will soon have such an essential unified "accident system" as well. The first step in that direction was taken in Moscow when efforts by almost 30 various agencies working on this issue were combined under the Ministry for Emergency Situations [Ministerstvo po chrezvychaynym situatsiyam (MChS)].

Also participating in discussion of all these issues, together with Russian participants (of which there were 26, plus specialists from Ukraine, Kazakhstan, Kirghizia and Uzbekistan) were specialists from the companies that comprise the Uranerz Consortium. They had only one complaint: the seminar was not attended by any specialists from the MChS, the Russian Ministry of Atomic Energy's Main Administration for Emergency Situations or similar agencies. However, according to the sponsors a special seminar for that type of structure will be held in the near future.

Norway's Berntsen on Komsomolets, Environmental Cooperation

MK0405114094 Moscow *KRASNAYA ZVEZDA*
in Russian 4 May 94 p 1

[Aleksandr Yegorov report: "Norwegian Minister Is Not Afraid of the Komsomolets"]

[Text] A meeting has ended in Moscow between Viktor Danilov-Danilyan, Russian Federation minister of environmental protection and natural resources, and Thorbjorn Berntsen, Norwegian environment minister, pertaining to the widening of bilateral and multilateral cooperation in the field of environmental protection.

The ministers stated at a press conference that they share the public concern over the threat of the Barents Sea region's being polluted by radioactive waste, its pollution from across the border by nickel-producing enterprises located in the border regions, and from accidents at nuclear facilities. They therefore think that it is necessary to carry out without delay cooperation projects planned by both sides, the most important among which is modernization of the Pechenganikel combine. In the final analysis, modernization is expected to result in cutting dioxin emissions to 40,000 tonnes against the 250,000 tonnes emitted in 1992.

It was noted at the press conference that the combine reconstruction concept submitted by a consortium of two Norwegian firms and one Swedish firm has been recognized as the winner in an international contest for the right to develop it. The "Norilsk Nickel" concern together with the Russian Economy Ministry are currently preparing a draft government decree on financing the modernization taking account of the share provided by the Norwegian side (about \$40 million).

To the question on Norway's stance on an alleged plutonium leak from the damaged hull of the lost Komsomolets nuclear-powered submarine, Minister T. Berntsen answered: "We keep a close watch on the situation. We are convinced that the submarine should not be disturbed needlessly. And there is no such need, our experts believe."

Ministry Formulates Strategy for Utilizing Waste

*LD0505122794 Moscow INTERFAX in English
1028 GMT 5 May 94*

[Text] The collegium of Russia's Environment Ministry has approved a draft program called Waste, worked out in accordance with government instructions and designed to a formulate a unified national policy toward handling production and consumption waste.

To be implemented before the year 2000, the program will require financing worth more than one trillion rubles (over 800 million dollars). The funds are to come from the federal budget, from the Federal Ecological Fund, from regional budgets and ecological funds, as well as from enterprises and commercial structures.

About 7 billion tons of waste is formed in Russia annually, with only 28 percent put to use. The total quantity of the accumulated toxic and ecologically dangerous waste has reached 1.6 billion tons.

The program provides for utilizing the waste containing mercury, one of the substances most dangerous to human health. This waste will be processed at the smelting plant of the Krasnodar mercury mines—the only facility of this kind functioning in Russia.

According to the authors of the document, one of the gravest problems is to utilize the waste of chromium-related production, no country in the world has resolved yet. According to last year's data, Russia has accumulated 9 million tons of this kind of waste, which is stored at the Khrompik plant in Sverdlovsk Region and at the Novotroitsk chromium combinations plant in Orenburg Region. As the authors of the program said, should the reservoirs containing such waste get damaged because of wear or natural disaster, the toxic chromium may create in the basin of the Rivers Chusovaya, Volga and Ural a catastrophic situation comparable with the accident at the Chernobyl nuclear-power plant.

The authors believe that the problem of utilizing the waste of chromium-related production in Russia can be partially resolved by means of introducing special technology, which makes it possible to transmute chromium into a non-toxic substance and obtain from it building materials for covering floors and tiling. This method was devised by a research center in Yekaterinburg.

Furthermore, the Waste program provides for processing and utilizing some other kinds of production and consumption waste, particularly zinc-containing waste and the waste of the cellulose and timber industries.

Japan Offers Cooperation in Radioactive Waste Disposal

*OW0505121994 Moscow Russian Television and Dubl
Networks in Russian 0605 GMT 4 May*

[S. Litus video report; from the "Dalniy Vostok" program]

[Text] What is to be done with the radioactive waste which has accumulated in great quantities in our kray is an ominous issue which does not seem to leave newspapers and television programs these days. The tanker TNT 5 filled with radioactive water is still moored at Zvezda in Bolshoy Kamen. Furthermore, the condition of the vessel is such that there is no guarantee the death-dealing contents will not spill out into the bay in the near future. This would be an ecological catastrophe. [video shows a nuclear submarine in dry dock, a rusty tanker, a person testing radioactivity in the presence of a naval officer, and a group of people inspecting the tanker]

Until recently, the liquid radioactive waste was simply poured into the sea. Now, thanks to the active protests of the world community, such dumping is forbidden. What are we to do? The Japanese Government is offering to help us solve this problem. Representatives of the neighboring states arrived in the Maritime Kray, and together with our government representatives and specialists they visited Bolshoy Kamen, after which they held a meeting at the kray administration. However, this conference gave rise to a strange feeling. The sensation was that the terrible misfortune hanging over the Maritime Kray concerns the Japanese Government far more than the Russian Government. The Japanese say they are prepared to try various approaches, allocate millions of dollars, and build and assemble installations to process the radioactive waste.

However, they need assurances. Where, when, and what will be the degree of Russian participation? From Russia there is only incomprehensible haggling and no assurances. *[video shows a meeting of Japanese and Russian officials, then cuts to show Litus interviewing Ye.I. Nazdratenko, leader of the Maritime Kray administration]*

[Begin Nazdratenko recording] You know very well that the people of the Maritime Kray have voted overwhelmingly for the new Constitution. They set a Russian Federation record; 72 percent of Maritime Kray voters cast a ballot. No other part of the country did that. Maritime Kray once again proved its maturity and citizenship. Maritime Kray residents once again underscored that there should be integrity in Russia as stated in the Constitution. The representatives of the federal authorities here today said: you are here, it is your problem and you have to solve it. I get the impression that the Maritime Kray residents are like a dog which is kind and devoted to its master. No matter how much the master abuses, humiliates, or hurts it, this dog always crawls back to its master. It crawls and crawls to prove its devotion to the master. The master, who is in an inexplicable state at that moment, simply kicks it in the face with his boot and pushes it away, saying I do not want you, so go away. The situation here strongly reminds me of this analogy. Just look for yourself! The problems here are your problems, they keep saying.

At the same time, they have weighed us down with customs duties, tariffs, and all kinds of conditions on maritime operations. Here we have to implement the state system, laws, and all the rest of it. This worries me very much and makes me guarded, although naturally we will continue to fight for Russian integrity and unity. I am for one president and one political authority in the Russian Federation, and that all territories should have completely equal rights as subjects of the federation in accordance with the Constitution. Presently this is not happening at all. *[end Nazdratenko recording]*

Problems of Nuclear Fuel Reprocessing, Waste Handling Eyed

PM0505110194 Moscow IZVESTIYA in Russian
5 May 94 p 2

[Article by Vladimir Ivanidze: "Greenpeace More Worried About Russia than Atomic Energy Ministry"]

[Excerpts] Apparently, a train carrying the spent nuclear fuel from the Finnish nuclear power station has now arrived successfully in notorious Chelyabinsk-65, despite all the efforts by members of the international environmental organization Greenpeace to prevent it from doing so. *[passage omitted]*

"We will take it and bury it. If we fail to fulfill the agreements concluded by the government no one will speak to us. We are obliged to take spent nuclear fuel from the Finnish nuclear power station (not waste) until 14 May 1999. The agreement does not stipulate burial, but the USSR pledged to take the fuel and it was up to it what it did with the fuel," Mr. Vishnevskiy [Yuriy Vishnevskiy,

chairman of the Russian Federation Federal Inspectorate for Nuclear and Radiation Safety] said.

Strange as it may seem, the date of expiration of the agreement, as indicated by the Federal Inspectorate chairman, does not coincide with the one announced last year by Finnish Trade and Industry Minister Seppo Kaariainen. According to him, shipments of spent nuclear fuel to Russia would cease in 1996, when the agreement expired. Who is telling the truth?

Nonetheless, no agreement has ever committed Russia to taking waste from other countries, according to Viktor Danilov-Danilyan, Russian Federation minister of ecology and natural resources. France and Britain, the main processors of nuclear fuel in Europe, ship all the nuclear waste to the countries that placed the orders for processing, thus creating the waste. But, incredibly, nuclear waste from other countries' fuel is being buried in Russia.

Incidentally, some days ago Mr. Danilov-Danilyan handed over an engineering project to his Norwegian colleagues for them to study and finance. A large part of it relates to the construction of a burial site on the Kola Peninsula.

"The burial site is intended primarily for radioactive waste produced in Russia itself, and for the waste that has already accumulated. In particular, on the Kola Peninsula. It is stored in such a way that it can in no way be regarded as satisfactory from the ecological viewpoint," the minister told IZVESTIYA.

Answering my question about the possibility of importing and burying nuclear waste from other countries in the future, Viktor Ivanovich suddenly stopped choosing his words carefully and ominously stated: "Who knows?"

The specter of the Atomic Energy Ministry that lay behind this ominous statement manifested itself on television screens at the end of last week in the shape of Georgiy Kaurov, who made the following statement: "The Greenpeace organization is trying to impose its own, non-Russian viewpoint on us. It is an international viewpoint, that of the mafia that engages in antinuclear lobbying."

It appears that the officials from the Federal Inspectorate have finally lost touch with reality and are treating everyone as a complete idiot. One of Finland's Swedish-language newspaper, in its 20 April 1994 issue, cites Mikhail Sharov, representative of the "Mayak" Production Association, who went to Finland to monitor the loading of the train with spent nuclear fuel.

"In 1993 Finland paid \$400 for each kilogram of spent nuclear fuel taken by Russia," the representative of the "Mayak" Production Association, or Chelyabinsk-65, told Finnish journalists.

So the Atomic Energy Ministry received \$11.6 million for the latest trainload alone. For similar processing in Britain the Finns would have paid two and one-half times as much, as prices stood two years ago. In addition they would have

gotten back all the solid and liquid waste from the processing of their nuclear fuel, including contaminated equipment, instruments, means of personal protection, packaging, special clothing and footwear for workers, and many other almost new items.

Incidentally, if the Atomic Energy Ministry were ever to curb its greed and try to return the nuclear waste, even then some of it would remain in Russia. The nuclear fuel processing technology at the "Mayak" Production Association is such that practically all the medium-active liquid waste is still discharged into nearby reservoirs.

'Greens' Protest Nuclear Waste Processing in Chelyabinsk

LD0505112194 Moscow ITAR-TASS in English
1111 GMT 5 May 94

[By ITAR-TASS correspondent Yevgeniy Tkachenko]

[Text] Chelyabinsk May 5 TASS—Russian greens picketed the building housing the Chelyabinsk regional administration today in protest against the chemical plant "Mayak's" continuing processing of used fuel from atomic reactors. The activists from the social movement "for nuclear safety" were particularly incensed by the arrival of another train shipment of such dangerous materials from Finland.

The environmentalists say that the processing of nuclear waste is worsening the none-too-bright environmental picture in Russia's Ural Mountains and demand that "Mayak" stop accepting shipments for processing.

But spokesman for the plant Yevgeniy Ryzhkov told ITAR-TASS that "the plant's current load in processing used nuclear fuel does not even reach half-capacity and causes no harm to the environment."

He added that "the Russian authorities have to fulfill contracts signed yet by the USSR and, what is more important, the processing is the main financial source for the implementation of large-scale environmental programmes in the region."

According to Ryzhkov, the Soviet and Russian nuclear industry produced a huge amount of liquid radioactive waste in their 45-year old history. It is difficult and dangerous to store it for long periods. The only solution, he said, is to turn them into compact, solid wastes.

The appropriate technology for such operations, the specialist explained, "has been created and is operating in our plant. It is necessary only to increase the machinery's capacity and build a few new furnaces. All this is being done at our own expense, and the main source of money for 'Mayak' has become the regeneration of used fuel which is transported here. One must take into account that the fuel contains from 90 to 95 percent uranium, which we put back into nuclear energy. And fuel regeneration produces much less waste than the production of nuclear fuel," he said.

Ryzhkov added that the shipment of used nuclear fuel, which caused such a commotion among the "greens" in

Finland and Russia, had been successfully delivered to "Mayak," unloaded, and was being processed "in a safe way."

New Expedition to Komsomolets Submarine in Preparation

LD0505111394

[Editorial Report] Moscow Ostankino Television First Channel Network in Russian at 0800 GMT on 5 May, in the "Novosti" newscast, carries a 2-minute report over video by correspondent Aleksandr Korovkin in which he claims that last year's expedition to the Komsomolets submarine, sunk in the Norwegian Sea five years ago, showed that "the process of destruction of the protective casing of nuclear warheads is proceeding considerably faster than has so far been supposed by experts. The analysis of the results of underwater research has prompted some scientists to say that the Norwegian Sea could become polluted with radioactive elements as early as next year."

Korovkin recalls that the submarine's warheads contain plutonium, with a half-life of 24,000 years. This extraordinarily toxic element is 10,000 times more toxic than arsenic.

The submarine is lying at a depth of 1,700 meters and the plankton which is to be found here is consumed by fish. "It is obvious that a sudden discharge of plutonium will rapidly cause an ecological disaster," Korovkin says, adding that a disaster of this kind can be averted and that Russia's Ministry of Civil Defense, Emergencies, and Natural Disasters is preparing a new expedition to the sunken submarine, charged with "filling the nose section and the torpedo tubes with a special sorbent, capable of preventing the escape of plutonium."

Deputy Minister Sergey Valentinovich Khetagurov says that the science ship Akademik Keldysh is due to leave Kaliningrad on 15 June with two bathyscapes on board. "All the operations that have been planned are to be carried out in the space of 50 days," Khetagurov says.

The report includes video footage of the sunken submarine.

Meager Funds for Water Conservation Work 'Squandered'

PM0605160794 Moscow ROSSIYSKAYA GAZETA
in Russian 6 May 94 First Edition p 3

[Report by Aleksandr Pimonov, department prosecutor in the Volga Interblast Nature Conservation Prosecutor's Office: "Who Will Be Frightened of a Fine?"]

[Text] Checks by nature conservation prosecutor's offices in the Volga basin have shown that the Statutes on Water Conservation Areas of Rivers, Lakes, and Reservoirs in Russia are being breached all over the place. Take the Nizhniy Novgorod Oblast Soviet, for example. Back in 1989 it approved a list of rivers, lakes, and reservoirs in which conservation areas were to be set up before the year 2000. The planning was supposed to be completed this year. But none of the work is being monitored, so one cannot expect any early results.

The riverbank situation in the Volga basin is no less lamentable. There are piles of scrap metal, domestic garbage, and dung. At the moment there are around 3,000 livestock units in the vicinity of the Volga basin rivers discharging effluent and waste directly into rivers because they have no treatment plants.

But the saddest thing of all is to see the small amounts of money allocated by the state for ecological purposes being squandered and plundered. For instance, in Aktanyshskiy Rayon, Republic of Tatarstan, as a result of the erosion of the banks of a stream called the Syun, three livestock burial grounds are in danger of being exposed, and one of them is infected with anthrax. The money that was intended for riverbank reinforcement work and for the removal of the livestock burial grounds to sites outside the conservation area has been used by the rayon administration for other purposes.

What can change the situation, I believe, is the elaboration of new statutes on water conservation areas.

'Environmental Safety Days' Observed

944F0655A Novosibirsk VECHERNYY NOVOSIBIRSK
in Russian 27 Apr 94 p 10

[Article by Irina Nikolayeva: "How To Make Ecological Concerns a Business Subject"]

[Text] Between 15 April and 5 June, "Ecological Safety Days" are being held in Russia; our city and oblast are actively participating in this event.

In particular, the recently created public organization—the Ecological Equilibrium foundation—opened its first self-financing structure in April, the bureau of environmental evaluation, whose primary business will be putting together normative documents for enterprises regarding maximum allowed discharges into the atmosphere. They will do it in cooperation with the foundation's partner—the Logos scientific-industrial foundation.

The bureau plans to offer other types of evaluation as well. I would remind that the Ecological Equilibrium foundation presented itself to the public on 1 March, describing as its goal development of environmental business. This organization intends to turn money-losing ecology into a zone of profitable and stable business. The bureau will conduct independent evaluation and project appraisal and bring it to a "working" condition by bringing in a broad range of specialists, including economists.

The first business project the foundation is already working on will be waste utilization at the Kudryashevo swine-breeding complex—one of the four largest animal husbandry complexes in Russia. Liquid waste will be processed into a solid substance—organic fertilizer. Remarkably, this requires minimal equipment, while productivity is quite high—as high as the demand for organic fertilizer.

The next step earmarked for implementation this year is the creation of a minicomplex: a parking lot, a gas station offering a skeleton set of repair and maintenance, and a car wash. Of course, there are quite a few such facilities in the

city, but none meets ecological safety standards. The new one, which is envisaged to be built in the Krasnoobsk area, will be fitted with a closed-loop purification system. This brings up a question: Why was it necessary to set up a public organization if the problems of ecological equilibrium are worked on one way or the other by state structures—the oblast and the city committees on ecology and natural resources.

"Briefly, I can answer it this way: State ecological organizations spend taxpayers money on liquidating the consequences of poor management. How successfully—you judge for yourself. Our foundation is trying to attract the public that is in some way or the other concerned over the unhealthy environment, earn money, and invest it in economically profitable projects and programs, in, as they say, 'high technology,'" replies foundation President Oleg Nikolayevich Kolmakov. "At the same time, we work in close—one may say, brotherly—contact with the oblast and city committees."

AZERBAIJAN

Caspian Sea Forum Planned

94WN0268A Baku ZERKALO in Russian 30 Apr 94
p 1

[Unattributed report under the rubric "Panorama": "EU International Conference in the Caspian Sea Problems"]

[Text] Several days ago Baku was visited by a delegation from the Hydrological Institute of Denmark, which is doing preparations for a project to deal with the Caspian Sea problems within the framework of the European Union's (EU) TESIS program, which provides technical assistance to CIS countries. As Fikret Dzhaferov, the chief of the department of planning for natural resource utilization of the Azerbaijani State Committee on Ecology, told ANSPRESS, this project envisages beginning in the nearest future work on organizing an international conference on the Caspian Sea problems, in which CIS member countries will participate. According to Fikret Dzhaferov, a preliminary agreement already has been reached on Azerbaijan's participation in this forum. Baku is a possible site for the conference. The staff of the Azerbaijani State Committee on Ecology refuted information that Armenian leadership intends to insist on holding this conference in Yerevan, as well as ensuring participation of this country, along with the Caspian coastal countries, in this forum. However, as ANSPRESS learned from reliable sources close to the Russian Government, such initiative on the part of Armenia has indeed taken place and it has been prompted by the fact that the EU underwrites all expenses on organizing and conducting this event.

At the same time, at the recent press conference Paolo Lembo, head of the UN Development Program in Azerbaijan, remarked that it is Baku that should become the center of research on the Caspian Sea problems. On 2 May, William Nikoff [as transliterated], a UN Development Program adviser, is expected to visit Azerbaijan; he will

also look into the Caspian problems reflected in the London report of the UN Development Program.

Government Fails To Act on Biodiversity

94WN0268B Baku ZERKALO in Russian 30 Apr 94
p 1

[Unattributed report under the rubric "Panorama": "Will Azerbaijan Join UN Conventions?"]

[Text] As ANS-PRESS was told in the Azerbaijani State Committee for Ecology and Control Over Rational Use of Natural Resources [Goskomekologiya], there is still no official answer from the president's staff and the republic's Cabinet of Ministers on the Goskomekologiya proposal regarding authorization for this organization to conduct negotiations within the UN Ecological Biodiversity Program—UNEBP. This problem is aggravated even more by the fact that the Azerbaijani parliament has not ratified the UN Convention on Biodiversity. However, the agency learned that the republic's Ministry of Foreign Affairs has requested through the UN temporary representation in Baku a package of international conventions on global ecological problems in order to submit them for the consideration of the National Assembly. It should be noted that in the event Azerbaijan does not join these conventions, this precludes the republic's participation in a number of programs of international ecological foundations.

KAZAKHSTAN

Money Shortage Delays Elimination of Radioactive Waste

LD0505123094 Moscow INTERFAX in English
1028 GMT 5 May 94

[Text] Representatives of Kazakhstan's Ministry for Ecology and Biological Resources fear that the shortage of money causes delays in commissioning (late 1994) of the first stage of the republic's system of utilization and burial of radioactive waste. A spokesman for the Ministry said that the program may be hampered by the negative attitude towards it by the heads of the regional administrations. For example, only the leadership of the Akmolinsk Region gave its consent for burial sites of radioactive waste on its territory.

This year it is also planned to devise maps of the burial of radioactive waste and its sources on the territory of Kazakhstan, to take photos and start research studies in the area of the Semipalatinsk test ground. The Ministry plans to spend 12.04 million tenges (over 414,000 U.S. dollars)

Last year the volume of investments constituted 1.82 million tenges (over 384,000 U.S. dollars as of the date of the introduction of the national currency in the republic). However, the general contractor responsible for the fulfillment of the radio ecological works, the National Nuclear Center of Kazakhstan, could not cope with the planned volume of research work due to the lack of funds.

At present the republic has a total of 900 enterprises polluting the environment and over 75,339 other sources of radioactive pollutants.

LATVIA

Environment Minister Signs Agreement With Finnish Colleague

LD0305193294 Riga Radio Riga Network in Latvian
1800 GMT 3 May 94

[Excerpt] In extending its sphere of activities, which only concerned environmental protection issues, the Latvian Ministry of Environmental Protection and Regional Development has concluded an agreement with the Finnish Ministry of the Environment on mutual support in territorial development planning and organization. [passage omitted]

UKRAINE

Environmental Situation, Emission Standards Detailed

WS0905075394 Odessa YUG in Russian 27 Apr 94 p 1
(Tentative)

[Report by V. Semenchenko: "What Do Statistics Know?"]

[Text] Out of 7,927 surveyed industrial enterprises, 12 percent exceed the permitted levels of exhaust and hazardous waste dumping. Over the past year, 30 emergency cases of waste dumping were reported, most of which ended up in the Black Sea basin. The "Tsentrolit" oil refinery and the pulp and paper mill in Ismail remain major contaminants of the environment.

However, this cloud of exhaust has its own silver lining. The drop in production spared us 17,500 tonnes of dirty emissions into the atmosphere and some 115,000 tonnes of toxic waste.

Vast damage has been inflicted by illegal logging. The growing number of hotbeds of disease and pestilence has obliterated 36 hectares of forest. However, employees of "Odessales" do not just sit around twiddling their thumbs. Already concluded prevention measures covered an area of 12,100 hectares—more than in the previous year. Unfortunately, there were fewer saplings planted this year. The reason remains the same: deficient fuel supplies.

The oblast's 37 hunting enterprises work to protect, breed, and control the quantity of wild animals and birds. In the "Dunayskiye Plavni" reserve, rare species of wildlife and flora are watched and protected.

Local Councils Oppose Storing Dry Nuclear Waste at Plant

AU0905161594 Kiev HOLOS UKRAYINY in Ukrainian
6 May 94 p 4

[Volodymyr Dupak report from Zaporizhzhya: "The Zaporizhzhya Atomic Electric Power Plant [AES] Will Not Be Halted?"]

[Text] Thanks to this week's delivery from Novosibirsk of nuclear fuel to the 61st-assembly Zaporizhzhya AES, the problem of fuel provision has been resolved for about one year.

As reported by the Information Center of the Zaporizhzhya AES, in summer, each one of the operating power units will be halted for a scheduled overhaul involving the reloading of fuel. This work will be started with Power Unit 1, which is presently under repair.

However, do not hasten to answer in the affirmative to the question posed in the heading. Under the pressure of the "Greens," sessions of the local councils of people's deputies of Kamyanka Dniprovsk in Zaporizhzhya Oblast and of Nikopol in Dnipropetrovsk Oblast, adopted a decision to hold, on 26 June, local referendums on building storage facilities for dry used nuclear fuel on the territory of the Zaporizhzhya AES.

We hope that residents of these towns and adjacent rayons will trust the conclusions made by atomic specialists—not only ours, but also those from the United States, Germany, Sweden, and Canada, where the system for dry-storing used nuclear fuel is already used. If the construction work takes one or one and one-half years longer, the Zaporizhzhya AES will have to start closing down power units next [1995] summer.

The reasons are that used nuclear fuel has not been evacuated from the plant for a long time, but accumulates in the reservoirs inside the sealed shells of the units. They cannot stretch indefinitely.

Minister Urges Ecological Awareness

AU0305103594 Lvov ZA VILNU UKRAYINU
in Ukrainian 26 Apr 94 p 3

[Interview with "minister of environmental protection Yuriy Spizhenko" by Oleh Nesterenko: "Crime Due to Ignorance"—name and title of minister as published; bureau records show Yuriy Kostenko as minister of environmental protection and Yuriy Spizhenko as Ukraine's minister of health]

[Text] Every passing year slightly lowers the acuteness with which we perceive the Chernobyl disaster. We buried those who were among the first victims of the radiation freed by the accident and we reconciled ourselves to their death, but we fail to see that people continue to perish near us and that children are born handicapped. We just attribute this to fate. We even seem to begin to get used to the phrase that our nation is dying out. For three years already the death-rate has prevailed over the birth-rate—the population of whole towns is disappearing, and we do not want to see this and even reproach those who are telling the truth—do not add salt to the wound, do not let it fester or it will never heal. However, I am sure that people must get information and know the truth, no matter how bitter it might be. In this, Ukraine's minister of environmental protection Yuriy Spizhenko [as published] agrees with me:

Minister: Once, when the USSR was still alive, these secrets were faithfully guarded by the State Committee for Atomic

Supervision. People did not know anything about the terrible accident in Chelyabinsk-40 [in Russia], about the explosions and discharges of huge amounts of radioactive elements into the environment at other atomic plants, which, on our territory, have no protective shells. However, we in Ukraine built a similar structure and allowed those who are only interested in the thoughtless exploitation of natural resources, to exercise control over nuclear safety. As soon as our ministry declared its right to tackle this problem and created a special administration, director of the Chernobyl AES Mr. Soroka started writing letters to all power structures openly demanding that the administration be abolished. Do you think that he will not get support? The powerful nuclear lobby is capable of anything in maintaining its positions. It may remove the Ministry of Environmental Protection from control over the nuclear monster, although our ministry is the only objective body in Ukraine that is free from known limitations and stands up for the interests of the majority of the people.

Nesterenko: Incidentally, rumors have spread in Kiev about barges and ships that took part in the cleanup after the Chernobyl accident and that are now in navigation and about containers in which radioactive sand was transported.

Minister: I do not know where they are now, in whose yards they stand, or who is using them. Do you know why? This is due to this legal chaos, organizational confusion, and because we have too many controlling organizations that remove this right from the Ministry of Environmental Protection.

Nesterenko: What other Ukrainian regions have also been ecologically contaminated?

Minister: According to the results of objective studies, the greater part of our country has been contaminated to one degree or another. These are chemical pollutants due to the incompetent use of means of protection of green plants and, of course, radioactive contamination. The territories of the Donets-Dniester [as published; possibly Donets-Dnieper] Region, where heavy industry prevails and areas affected by the Chernobyl accident are in a particularly bad situation. Of course, a gradual decrease in the levels of radioactivity is taking place, but, at the same time, increasingly larger territories are subjected to contamination. These are physical processes and there is no escaping them.

Nesterenko: I heard that you are advocating the idea of closing down atomic electric power plants?

Minister: This is not quite so, I am in favor of closing down the Chernobyl AES, or, more specifically, of closing down reactors of the Chernobyl type not only in Ukraine, but throughout the world.

Nesterenko: Where else do they operate?

Minister: Eleven in Russia, incidentally, not far from the border with Ukraine, and one in Lithuania....

Nesterenko: Those without protective shells?

Minister: Yes, but the point is that, in civilized countries, such reactors have many different protection systems, and the last of these is the hermetic shell. In our country, you see for yourself.

In view of this situation, it is necessary to raise the question at an international level and resolve it by joint efforts. A single state will not be able to do this.

It is an entirely different problem—whether Ukraine can do without nuclear power engineering. I answer—it can't! First, natural resources are being exhausted at a fast rate, primarily such energy sources as coal, oil, and gas. They are becoming more expensive, and the price of electricity grows. In the future, thermal plants will gradually become less numerous, and nuclear energy must go through its second birth. However, it will be based upon safe types of reactors after the problem of utilizing radioactive waste is resolved. Besides, there must be uranium. If all of this does not prove to be economically profitable, society will look for other sources of energy provision.

Nesterenko: How would you use our nuclear weapons for peaceful purposes?

Minister: Nuclear warheads contain highly enriched uranium and plutonium, and it might be good to use them for the needs of our power engineering. For this, according to the State Committee for Atomic Energy, it is necessary to proceed to a different type of reactor, and then the raw materials will be sufficient for us for the next 150-200 years. This is better than to receive heat-generating cassettes from Russia over two or three years and then again to be confronted with today's problem: Either to develop our own production or to depend upon our northern neighbor. That is why I am saying that it is better to use the nuclear warheads for our own purposes: To repair them and stockpile. We have facilities for storing them for a long time.

Another variant is to sell these materials at their true price, rather than to barter—warheads in exchange for fuel for atomic plants. If we had formulated the issue in such a way, the United States might have supported us, but now....

... Now we present our losses as an achievement by saying: It is good that Russia will provide us with fuel for our AES's.

Nesterenko: Excuse me, but this is a game of hide-and-seek with our own people.

Minister: That is why we should not be afraid of hurting people by telling them the truth.

We must speak more frequently on these matters, at least in order to make our people ecologically conscious. When one looks at the people, the impression is as though there are only ignoramuses, both at the top and at the bottom. From this situation there is just one step to crime.

UZBEKISTAN

Flooding Threatens Fergana Valley With Radiation Pollution

LD0205212694 Moscow Mayak Radio Network
in Russian 1337 GMT 2 May 94

[Text] Maya Ganiyeva, our correspondent in Uzbekistan, once again returns in her reportage to the program's theme of spring floods, but the report is much more alarming than those from Nizhniy Novgorod and Rostov-on-Don. The fact is that, specifically because of heavy flooding, the threat of radioactive pollution hangs over the heavily populated Fergana Valley of Uzbekistan. Let us hear from Maya Ganiyeva:

Ganiyeva: I am bringing you this report from the shores of the mountain river Mayli-Say. The town with the same name in Kyrgyzstan is situated not far from here. It was founded in the 1930's following the discovery of uranium ores. Its processing capacities—an enrichment factory and a hydrometallurgical works—were soon built. In 1968, when all supplies were exhausted, they were simply destroyed. Traces remained, however, just as the burial grounds of radioactive materials also remained. What is interesting is that there is radioactive waste in the ground from everywhere, even from Czechoslovakia.

Following the mudslides, heavy rain, and landslides, there was a real danger of poisonous substances finding their way into the river. It is swollen to an incredible size here. At any moment, the water sweeping all around may also wash away the radioactive tombs. There below is the Fergana Valley. The most alarming thing is that this whole area, the Syr Darya River that runs through it, and large regions of Central Asia may become polluted. That is why the Governments of Uzbekistan and Kyrgyzstan and the public have sounded the alarm. Even now a government commission has been set up, and there has been rapid strengthening of the banks. Hydrological facilities that may absorb the waters are being planned.

I flew in here with a special international group headed by Ecosan, the Uzbekistan ecology and health fund. The Ecosan international fund has brought aid—medical supplies and disposable syringes—to those hit by the landslides.

My companion is Yusuf Shedemetov, president of the Ecosan international fund. Yusuf Shedemetovich, what is being done to avert a disaster?

Shedemetov: The main task is to bring it to the attention of the world community, the leaders of the Central Asian states, and the governments of this region—all governments. In addition, it is also necessary to ask the Russian Federation for help. Many specialists and many leaders of the ministry of that time worked in this region. They left a lot of traces. Also, our research here shows that there is still a lack of technical documentation that would be very useful today for deeper scientific research. That is why the Academy of Sciences of the Russian Federation and many ministries, departments, and state committees could render practical aid.

Ganiyeva: Yes, it would be a very great mistake if these blossoming pistachio and apricot orchards were turned into a mini-Chernobyl. One would like to hope that the efforts of ecologists and the public will not be wasted and that the valley will be preserved for life to the full.

REGIONAL AFFAIRS

Storting Backs Nuclear Waste Dump Close to Swedish Border

PM0405151494 Stockholm SVENSKA DAGBLADET in Swedish 29 Apr 94 p 12

[Bjorn Lindahl report: "Nuclear Waste Dump To Be Built Close to Swedish Border"]

[Text] Oslo—Despite protests from local authorities on both sides of the border the Norwegian Storting yesterday decided that a dump for radioactive waste will be built in Himdalen, 30 km from the Swedish local authorities of Eda and Arjang which lie on the border with Norway.

It is waste from Norway's two research reactors which is to be stored here, together with low- and medium-level radioactive waste from hospitals. A cavern will be constructed under a ridge 170 meters above sea level in an area where rock types are full of cracks and where drainage water runs out into a river.

Environmental organizations and Norwegian Geological Investigations, where the foremost geological expertise is to be found, have criticized the planned facility and think that there is a risk that the radioactive waste will leak out into the ground water. The International Atomic Energy Agency has also asked to see the Norwegian plans. There was tough criticism of Norwegian Industry Minister Jens Stoltenberg during the Storting debate.

"I have never seen so important a question put before the Storting with such inadequate information," Environment Committee chairman Ragnhild Queseth Haarstad (Center Party) said.

Paul Chaffey from the Socialist Left Party wondered where the negative comments from the experts had been concealed.

"Why has the industry minister not included the comments made by Sweden's National Nuclear Inspection Board?" he asked.

The Storting was divided across party boundaries, but the Labor Party won enough support from the Conservative Party and the Progress Party for a decision to be reached by 71 votes to 57. Industry Minister Stoltenberg defended himself by saying that it is not the rock around the facility which is to prevent radioactive leaks.

"The barrels will be cast in concrete casings and these in their turn will be place in a concrete sarcophagus. If we notice that the concrete does not come up to standard or if, contrary to expectations, radioactivity does leak out we can take the barrels out again," he said.

Hitherto the waste from the two research reactors at Halden and Kjeller has been stored in 1,000 barrels buried underground at the Institute for Energy Technology at Kjeller. A further 1,500 barrels are in a temporary storage facility. As well as low- and medium-level waste, small quantities of plutonium—with a half-life of 24,000 years—will also have to be stored.

AUSTRIA

Greens Decide on Definite Rejection of EU Membership

AU0105143294 Vienna KURIER in German 1 May 94 p 2

[Report by Andreas Anzenberger and Dieter Holzweber: "Special Referendum on EU Defense Alliance?"]

[Text] With "Greetings from Villach" Pro-European Union [EU] activities welcomed the 168 delegates on Saturday morning [30 April] for the federal European congress of the Greens. On fliers, which referred to the activities of Freedom Party of Austria [FPOe] Chairman Haider in Carinthia, the common rejection of EU membership by the Greens and the FPOe was criticized.

In Goldegg Castle (Salzburg) the Greens decided with 87 percent of the votes that they will definitely vote against membership. EU advocates, such as Environmental Spokeswoman Lanthgaler and Vienna City Councilor Chorrherr, remained in the minority.

It was clear from the very start that the speeches by Foreign Minister Mock and EU State Secretary Ederer, who were invited as guests, would not be able to change the mood. The government members pointed not only to the advantages of membership but also voiced praise: The Greens have essentially contributed to the development of an awareness for the environment.

Mock stressed that neutrality will not be restricted even after the EU's institutional reform, which is planned for 1996. There are two possible scenarios: If the Western European Union [WEU] (the EU's defense alliance) develops into a collective security system along the lines of the United Nations, membership in this alliance will be possible also as neutral state. Otherwise, a special referendum on neutrality would be necessary before joining the WEU.

This statement caused displeasure at the coalition partner Social Democratic Party of Austria. Chancellor Vranitzky told KURIER: "Austria will actively participate in the establishment of a collective security system in Europe. However, there is no coercion to join the WEU. Therefore, the discussion about a special referendum on neutrality is superfluous."

The reaction by Greens Federal Spokesman Pilz: "The Government has already worked out a two-step plan for abolishing neutrality. The first step is joining the EU."

WWF Warns Against Water Pollution by Slovak Danube Dam

AU0905175494 Prague CTK in English 1537 GMT 9 May 94

[Text] Vienna, May 9 (CTK)—Representatives of the Austrian section of the World Wide Fund for Nature (WWF) warned today of the pollution of the Danube flood plain forests by the Slovak Gabčíkovo water project.

The area, which is located on a large gravel subsoil, is the second biggest European source of drinking water.

The WWF, which is now launching a campaign to establish a national park in the Danube flood plain forests between Vienna and Slovak border, demonstrated the adverse effects of the regulated water flow on nature to journalists from Germany, Austria, and the Czech Republic during a several-day educational excursion.

The self-purification of the flood plain forests as well as the heterogeneity of its fauna and flora depend on the changing level of the river. Regular floods in this unique landscape are a precondition of its existence, Alexander Zinke from the WWF said.

By diverting 80-90 percent of the Danube water into an insulated channel, the old riverbed receives only a minimum amount of water, which will soon entirely change the natural character of the landscape.

The Austrian environmentalists have proposed a "tender variant" which entails letting 65-75 percent of the Danube waters flow in the old riverbed.

At least three years will elapse before the Hungarian-Slovak dispute at the International Court of Justice at The Hague is settled. In the meantime, many species will be exterminated, the WWF stressed.

BELGIUM

New Radioactive Waste Processing Plant, Storage Facility

BR0905095194 Brussels BRTN-TV1 Television Network in Dutch 1830 GMT 5 May 94

[Wouter Dambre video report]

[Text] NIRAS, the national office for radioactive waste and enriched nuclear fuels, will soon be responsible for two new plants, costing 4.5 billion Belgian francs, half of which is to be paid by electricity producers. The plants include a central processing unit for low-radioactive waste and a storage place for medium- and high-radioactive waste.

[Begin recording] Dambre: [video shows outside of processing units; containers on rolling mat; hydraulic press and compressed containers; general view of inside of plant] Here is CILVA, the central infrastructure for low-radioactive solid waste. It is a highly modern plant where low-radioactive waste is processed. The waste comes mainly from nuclear plants, hospitals, and laboratories. Belgo-Process, the industrial subsidiary of NIRAS, will simultaneously take delivery of the processing unit at the end of May.

NIRAS General Director Decamps: This is a unique project in Belgium, and also in Europe. It is the most up-to-date plant of this type for the processing of low-radioactive waste. The waste is processed in such a way so as to confine the radioactivity in a safe container.

Dambre: Containers with low-radioactive waste are compressed by a hydraulic press to reduce the volume of the

waste. What is left goes into large casks in which concrete is cast. The radiation thus stays inside. Each year 250 tons of low-radioactive waste also can be burnt here. The ashes are then refined, compressed, and end up in containers in which a layer of concrete is cast.

NIRAS also has built a new storage place for high-radioactive waste. Starting in 1995, the nuclear waste from spent fuel from Belgian nuclear plants will end up here.

Decamps: The waste will have to be stored here at least 40 to 50 years until it possibly can be stored, for example, in clay layers deep in the sea. [end recording]

FRANCE

Environment Minister on Nuclear Energy Policy

BR0905151594 Paris LE FIGARO in French 9 May 94 p 9

[Interview with French Environment Minister Michel Barnier by Jerome Strazzulla; place and date not given: "Michel Barnier: 'Our Culture of Nuclear Safety'"—first paragraph is LE FIGARO introduction]

[Text] On the eighth anniversary of the Chernobyl disaster, the upsurge of nuclear safety problems in eastern Europe, the "long march" to Paris by opponents to the Superphenix [fast breeder reactor], and a national debate on energy initiated by the government for the first time in 10 years: Spring looks like it will be dominated by the atom. Environment Minister Michel Barnier explained the government's policy and its prospects in the area of nuclear energy.

Strazzulla: You are the environment minister of the world's most nuclearized country. Do you get comments from your counterparts, especially the European ones?

Barnier: At no time within the Council of Environment Ministers of the European Union (EU) has France's policy been called into question in front of me. Every country has chosen its strategy; we are not the only country which opted for nuclear energy, even though in France it covers 75 percent of our electricity requirements.

I think that other countries know our culture of nuclear safety, the rigorousness of our inspections, and the quality of our companies. This does not stop us from talking about it.

Whatever the atom's share in energy production, we have all experienced common problems: especially with safety, electricity lines, and nuclear waste.

Strazzulla: As far as the choice of energy is concerned, what kind of maneuvering room does the environment minister have?

Barnier: The environment minister assumes a special responsibility which he shares with the minister of industry: nuclear safety. This is an issue to which I am personally committed. The government is working in a homogeneous manner.

In the end, we ask ourselves the same questions, albeit with different approaches. The most important signal, an initiative by the prime minister, can be found in his desire to see an open, national discussion on energy and the environment.

I have the feeling that this debate will raise greater interest among local and national operators than we might expect. Within the government, I feel quite easy saying, for example, that in France we must revive diversification in energy production and move toward hydroelectricity, renewable energies, and biofuels, among other things.

Strazzulla: Should we expect major changes in the national energy policy following this debate?

Barnier: There is no use telling stories; it will not call into question our electronuclear strategy and choice. However, what might emerge from this debate is a greater understanding and a better control over this choice. It should also help revive the energy conservation policy, which we inexorably dismantled 10 years ago. I would add a concern to this, namely a concern for greater transparency and greater control over energy policy by Parliament.

This is why I raised the idea of a law on nuclear safety. Lastly, this debate is linked to the law on regional reorganization and decentralization, especially as far as transport policy and the rebalance between road and rail transport are concerned.

Strazzulla: The alleged greenhouse effect is the new argument used by the nuclear lobby. Does this seem credible to you?

Barnier: The current debate between scientists is focused more on the seriousness of the greenhouse effect than on its existence. In addition, I am organizing the third "Segur Talks" on this topic on 16 May. While waiting to know the truth, we have to apply the principle of caution. It is essential to limit greenhouse gas emissions, especially carbon dioxide.

From this point of view, nuclear energy is actually a clean energy. However, it raises other problems, the most serious of which is waste.

Strazzulla: The West seems to want to mobilize to help Ukraine decommission its plant in Chernobyl. What are the main options considered?

Barnier: The shutdown of the two most dangerous reactors in Chernobyl is something desired by both the West and Ukraine. The prime minister asked us to prepare a specific initiative to bring about this shutdown, in liaison with the other countries of the European Union and the G-7.

This point will be one of the main elements in the Naples summit. Apart from the reactors, a new sarcophagus has to be built in Chernobyl and there are still the major problems of radioactive waste and water protection.

In order to meet Ukraine's energy needs, we could bring two or three new reactors on line. That would assume a new culture of nuclear safety in that country, as well as exceptional support from all the Western countries. Lastly, in all

the new democracies, there is an enormous amount of energy waste. Helping them better manage their networks and resources is a big part of the solution to their problems.

Strazzulla: After 40 years of operation, the problem of nuclear waste has emerged in France. What do you think of it?

Barnier: I believe that the operators and the bodies in charge of nuclear energy have demonstrated a lack of foresight by putting this issue off until later. Yet, very few political decisions affect future generations to the same extent as the production of long-life nuclear waste lasting 10,000 years or more. The issue was finally raised—rightly—in the late eighties.

The beginning of a solution was provided by the law of 1991 and the work of the Bataille mission concerning the setting up of underground laboratories for studying deep storage.

Strazzulla: From the point of view of lack of foresight, can we dissociate nuclear waste from other industrial waste?

Barnier: All industries produce waste. In the past, industrial waste was often stored or buried in any manner and anywhere. It is true that the industries which produced this waste had no more foresight than the nuclear industry.

One of my first actions upon arriving in government was to launch an in-depth inquiry in each department in order to draw up a comprehensive and prioritized list of polluted sites. Once this list is drawn up, we will have to find the resources to treat these sites. I do not want anything to do with a "contaminated earth" case.

Nuclear energy also produces end waste. It must be made quite clear that no matter what type of reprocessing is used, we must have underground storage sites for long-life radioactive waste.

As for the processing of slightly radioactive waste, this process must be more stringently managed.

Strazzulla: Nuclear physicists assure us that the waste problem will not be resolved with an incinerator. So what were the government's real motivations in deciding to reactivate the Superphenix reactor?

Barnier: Superphenix will not be built to destroy all the waste produced by France's 57 nuclear reactors.

The prime minister made a basic decision, namely to stop fast breeding operations in Creys-Malville in two years' time, in other words, to stop producing plutonium.

The facility will make it possible to carry out experiments aimed at gaining better knowledge of the means of reducing the volume of the most dangerous nuclear waste.

I therefore have some trouble understanding the attitude of certain ecologists vis-a-vis Superphenix at this time.

Bearing in mind the mass of money, research, and expertise invested in this site, it would have been inconceivable to write it off. This decision is in line with general interest.

GERMANY

SPD Says 95,000 Tonnes of Nuclear Waste in World Seas*AU2904200594 Hamburg BILD in German 29 Apr 94 p 2*

[Unattributed report: "95,000 Tonnes of Nuclear Waste Have Been Dumped Into the Seas"]

[Text] According to the Social Democratic Party of Germany [SPD], approximately 95,000 tonnes of nuclear waste have been dumped into the world seas.

This was announced by the environmental spokesman of the SPD Bundestag group, Michael Mueller. The Federal Government dealt with a corresponding inquiry by the SPD late in the evening yesterday.

"Military enterprises are the main culprits," particularly in former USSR, but also in Western countries, Mueller stressed.

Mueller called for a worldwide agreement against the dumping of nuclear material and a ban of nuclear-powered submarines.

The member of the Christian Democratic Union, Klaus Harries, suggested controlling the draining of radioactive waste water from the reprocessing plants in Sellafield (Great Britain) and La Hague (France).

The Federal Government sees no need to speak of a "general contamination of the world seas" because of the dumping of radioactive waste resulting from the civilian and military use of nuclear energy. The European coastal waters (North Sea and Baltic Sea) are not directly endangered.

'Enormous Sums' Required To Repair GDR Environmental Damage*AU0605113694 Berlin DIE WELT in German 6 May 94 p 13*

[Unattributed report: "Eastern Clean-Up To Cost Up To 270 Billion DM"]

[Text] Enormous sums are required to clean up the extensive environmental damage in the former GDR, concludes a study commissioned by the Industrial Initiative for Environmental Protection in the New Laender.

Most of the environmental damage in the ex-GDR was caused by planned economy considerations. The GDR wanted to increase industrial output at all costs, and was never genuinely concerned about a clean environment.

The Institute of German Industry says major investments are required to clear the damage. The lowest estimate is 82.8 billion marks [DM], the highest is DM521 billion. The widest range of estimates concerns the removal of old waste. The cost of performing this operation is estimated at between DM3 billion and 270 billion. The operation would entail either the elimination of acute dangers, for instance

by erecting fences around contaminated lakes, or comprehensive cleaning-up work, such as the excavation, cleaning, and recultivation of soil.

In the GDR, enterprises were supplied with quantities of energy equal to the quantities they had consumed during the previous period of reckoning, a practice that led to senseless waste. Therefore, an enterprise that consumed its coal supply sparingly could expect to receive less coal for the following period.

In this way, energy was wasted without regard to the environment, says the report. Therefore, private households also felt no encouragement to economize on energy.

Kazakhstan To Receive DM31.5 Million In Development Aid*AU0605182394 Hamburg DPA in German 1550 GMT 6 May 94*

[Text] Bonn—The Federal Government is to pay 31.5 million German marks in development aid to Kazakhstan in 1994 to help fund the country's transition from a planned to a free market economy. The Economic Cooperation Ministry in Bonn said on Friday [6 May] that the major part of the funds will go into environmental protection, because Kazakhstan has suffered very badly from nuclear tests and polluted and dried out rivers and lakes.

NORWAY

Environment Aide Seeks Russian Action on Kola Peninsula*PM0505173494 Oslo AFTENPOSTEN in Norwegian 30 Apr 94 p 5*

[Halvor Tjonn report: "Berntsen Dissatisfied With Environmental Progress on the Kola Peninsula"]

[Text] Moscow—Thorbjorn Berntsen is seeking new Russian initiatives in the environmental work on the Kola Peninsula.

The Norwegian environment minister has said there is no reason to express satisfaction with the progress in the work to clean up the nickel works on the Kola Peninsula. For the last two days he has been discussing this issue, among others, with his Russian counterpart, Viktor Danilov-Danilyan, in Moscow.

"I had been hoping that we would have made greater progress in the work to finance the rebuilding of the nickel works on the Kola Peninsula," Thorbjorn Berntsen said. "The Russian environmental authorities are working on the matter. It is impossible to find fault with their work. But they are meeting with resistance at home, not least because of the difficult economic situation. You have to remember that the project has a budget framework of 1.5 to 2 billion Norwegian kroner, of which Norway will contribute 300 million. That is a lot of money in today's Russia."

Berntsen also stressed that we must nevertheless not give up hope of a breakthrough on the Kola Peninsula soon. "I have been discussing this matter for several years with the

Russian environmental protection authorities. We will solve the problems as quickly as possible," he said.

At a press conference at the Russian Environment Ministry Berntsen's Russian counterpart got into a heated exchange with journalists present. Danilov-Danilyan said that it is impossible for money to be allocated to the Kola project this year. Berntsen in turn said that it serves no purpose to make a drama out of a crisis. The cooperation between Norwegian and Russian authorities remains constructive, and the Norwegian side is concentrating on one step at a time.

As well as the question of Nikel, Berntsen has also discussed the question of building a storage facility for radioactive waste in northwestern Russia. "Everyone has the aim of building this facility. But where it will be sited is as yet an open question. It is desirable that transport routes should not be too long, whether it is on the Kola Peninsula or Novaya Zemlya. But I would stress that the budget framework is so huge that this will be a major effort. There must therefore be further discussion of financing," Berntsen said.

He thinks that there is every reason to follow closely what is happening at the storage facilities for liquid nuclear waste

near the town of Chelyabinsk in Siberia. At present there are floods in this area. At worst the liquid waste could run out into the River Ob, then the Kara Sea, and eventually reach the Norwegian coast and fishing waters. "This is a permanent problem, and Russian and Norwegian authorities are working together on the matter the whole time," Berntsen said.

On Thursday [28 April] Berntsen met with Russian Atomic Energy Minister Viktor Mikhaylov. According to what has leaked out from the meeting, the shape the meeting took was that Mikhaylov launched into a long monotonous monologue directed at Berntsen about the blessings of nuclear power. According to those present at the meeting, Berntsen remained "surprisingly calm," given the claims the Russian minister was making.

"I have to say that one rarely meets a person with so devoted a relationship to nuclear power. To me it seems unsubtle and uncritical. But I would like to stress that when it comes to cooperation on concrete problems, there is nothing to be said against Russia's willingness to cooperate," Berntsen stressed.

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